Chapter 9
Addressing Population Issues
I. Population and Quality of Life

• A. Difficult to meet basic needs in developing countries

• B. Problems associated with overpopulation:
  – 1. Environmental degradation
  – 2. Hunger
  – 3. Persistent poverty
  – 4. Economic stagnation
  – 5. Urban deterioration
  – 6. Health issues
• C. Carrying Capacity (K)
  – The maximum number of individuals of a given species that a particular environment can support for an indefinite period, assuming no changes in the environment
• D. Overuse of land can cause a decrease in carrying capacity
• E. Uncertain what the carrying capacity of the earth is for humans
II. Population and Chronic Hunger

• A. Food security
  – Condition in which people live with chronic hunger and malnutrition

• B. Effects of Chronic Hunger
  ▪ 1. Weakened immune system
  ▪ 2. Illness and disease
    ▪ Malaria
    ▪ Measles
    ▪ Diarrhea
    ▪ Acute respiratory illness
• C. Food insecurity
  – 1. Conditions under which people live with continuous threat of starvation

• D. Solving the Food Problem
  – 1. Control population growth
  – 2. Promote economic development of developing countries without adequate food supplies
  – 3. Provide access to food and land resources to those who live in areas without them
Food insecurity

• In shaded countries, more than 20% of population is undernourished
III. Economic Effects of Population Growth

• A. Two viewpoints from economists:
  – 1. Population growth stimulates economic development and technological innovation
  – 2. Rapid population expansion hampers developmental efforts
• B. Most observations support the second viewpoint
• C. In order for country to increase its standard of living, its economic growth must exceed its population growth
IV. Reducing the Total Fertility Rate

A. Three major influences on total fertility rate – TFR – the average number of children born per woman, given the population’s current birth rate

1. Cultural traditions
2. Social & economic status of women
3. Family planning
B. Cultural Traditions

1. Culture influences and controls individuals’ behaviors
   - Marriage age
   - Due to high infant and child mortality rates, couple is expected to have large number of children
   - Children often work in family business
   - Religious values
C. Social & Economic Status of Women

• 1. Gender inequality is common worldwide

• 2. Disparities
  – Political participation
  – Social status
  – Economic status
  – Health status
  – Legal rights
  – Education
  – Employment and earnings

Single most important factor affecting high total fertility rates is low status of women
D. Educational Opportunities and Fertility

• 1. Women with more education
  – Marry later
  – Have fewer children
E. Family Planning Services

1. Family planning services offer information to both men and women on sexuality, contraception, STDs, and parenting.
Contraceptive Use Among Married Women of Reproductive Age

- **Nigeria**: High fertility rate, low modern contraception use.
- **Pakistan**: Moderate fertility rate, moderate modern contraception use.
- **India**: Low fertility rate, high modern contraception use.
- **Brazil**: High modern contraception use, moderate fertility rate.
- **Germany**: Low modern contraception use, very low fertility rate.
V. Government Policies and Fertility - China

• A. Largest population in the world

• B. Controversial Family Planning Policy
  – 1. 1971 - Chinese Government actively pursued birth control
  – 2. 1979 - Incentives to promote later marriages and one-child families
    • Medical care, schooling for child, preferential housing, retirement funds
  – 3. Brought about rapid and drastic decrease in fertility
• C. Law – controversial and unpopular
  – 1. Social pressure to abort a second child
  – 2. Pressure to abort/kill female first child
  - More boys than girls in China

• D. Law more relaxed in rural China

• E. 2008
  TFR = 1.6
VI. Government Policy and Fertility

India

• A. Severe population pressure
  – 1. 1950 - first country with government-sponsored family planning
    • Did not work due to language/cultural barriers
  – 2. 1976 - introduced incentives and compulsory sterilization
    • Unpopular and failure
  – 3. Recently- government focused on education
    • Effective, TFR dropped from 5.3 (1980) to 2.8 (2008)
VII. Government Policy and Fertility - Mexico

• A. Young age structure
  – 1. Huge potential for population growth: 32% of population is under age 15
    • High Population Growth Momentum

• B. 1974 - government imparted educational reform, family planning, health care
  – 1. Very successful
  – 2. TFR dropped from 6.7 (1970) to 2.3 (2008)
VIII. Government Policy and Fertility - Nigeria

• A. Population challenge
  – Largest population of any African country

• B. Very high reproductive potential: 43% of population is less than age 15
  – TFR has barely decreased: 6.0 (1980) to 5.9 (2008)

• C. Current National Population Policy
  – Improving health care
  – Population education
IX. Government Policy and Fertility - Europe

- A. Population concern
  - Proportion elderly people in population is increasing
  - Due to low TFR

- B. Decrease in population could cause decrease economic growth
X. Achieving Population Stabilization

• A. How can developing country governments help?
  – Increase $$ allotted to public health and family planning services
  – Education on methods of birth control
  – Increase average level of education

• B. How can developed country governments help?
  – Provide financial support
  – Supporting research and development of new birth control methods
XI. Millennium Development Goals (MDGS)

• A. 189 heads of state met at the UN Millennium Summit to address how to meet the needs of these hundreds of millions of impoverished people

• B. Goals
  – 1. Eradicate extreme hunger and poverty
    • a. halve the number of people living on an income of less than US $1 a day by 2015
    • b. halve the proportion of people who suffer from hunger
– 2. Achieve universal primary education – all boys and girls should enroll in and complete a primary education (grades 1 through 5) – limiting family size is important for this goal because children in larger families are less likely to enroll in school and more likely to drop out than children in smaller families

– 3. Promote gender equality and empower women – all women have the right to determine if and when they will bear children
– 4. reduce child mortality – reduce the mortality rate of infants and children younger than five years of age by 2/3 – allow more time between births, access to family planning, and gender equality

– 5. improve maternal health – the maternal mortality ratio should be reduced by 2/3

– 6. combat HIV/AIDS, malaria, and other diseases
7. ensure environmental sustainability – reversing the loss of natural resources, halving the number of people without sustainable access to safe drinking water and basic sanitation, and improving the lives of at least 100 million people living in slums – must address the increasing pressure on the environment by rising populations in developing countries and the consumption patterns of people living in highly developed countries.
8. develop a global partnership for economic development – the financial aspect of the MDGs are encompassed in this goal – must provide measures for debt relief for the external debts in developing countries, create productive jobs for young people, and providing access to affordable medicines in developing countries