A Crowded Home
Fundamentals of Population Growth: Fertility and Mortality
Population Geography
• Two factors on which all changes in population growth depend
  – Fertility
  – Mortality

– Measures
– Factors that influence rates
– Temporal and spatial variations
• Declining fertility in developed and less developed parts of the world
• Less developed world populations still growing rapidly

*Pearls Before Swine, October 1st, 2008*

Factors Affecting Fertility
• Biological

• Age and fecundity
• Nutritional wellbeing
• Diet and low body fat in women

• Economic

• Declines with industrialization
• Demographic transition theory

• Cultural

• Primary factor in fertility reduction
• Nuptiality and association with fertility
  – Early, late and non-marriage effects
• Contraceptive use
  – Government and religious attitudes
• Abortion
  – Religious / moral issues
  – Government attitude

Declining Fertility in the LDW
• Began in 1970s, largely due to cultural and economic change
• Significant trend in Latin America and Asia

• Availability and acceptance of contraception, family-planning programs, and education through media

Declining Fertility in the LDW
Declining Fertility in the MDW
• Lowest fertility rates found in Central and Eastern Europe
• Desire to postpone and have smaller families
  – Reflection of transition from old to new political and economic systems with end of communism
• Economic decline
• High unemployment
• Net population loss with TFR below replacement level of 2.1 (Germany = 1.3)

Declining Fertility in the DW
Canada
The Fertility Transition Model
• 1970s start of decline in less developed world (LWD)
• Matches pattern of developed world
• BUT faster change, in very different socio-economic circumstances

• Family planning + modern contraception
  = lower fertility

• Reproductive revolution?
The Fertility Transition Model
• Role of media in cultural change

• Large families cause problems:
  – Pressure on agricultural land
  – Crowded urban conditions, lack of jobs

The Fertility Transition Model
• Improved status of women in LDCs
• Economic development creates conditions for key CULTURAL shift
  • “No progress is possible without the full and equal participation of women and men.”
    UN Secretary General Boutros Boutros-Ghali (1995)

• Crude Death Rate (CDR)
  – Total number of death (annually) for every 1,000 people
  – Does not account for probability of dying
• Infant Mortality Rate (IMR)
  – Number of children who die in the first year of life per 1,000 live births
  – 2005, global IMR = 54
  – Iceland = 2.4 (Canada=4.6)
  – Sierra Leone = 165
– Measurement of level of development

Factors Affecting Mortality

• WHO recognizes over 850 causes of death…however…

• SOCIO-ECONOMIC STATUS
  – High standard of living
  – Reliable food sources and good nutrition
  – Good sanitation
  – Accessible and well-developed health services
  – Security

Factors Affecting Mortality

The Demographic Transition Model

• Descriptive generalization of developed world experience
• Simplified, but real

• Most of the developed world reached Stage 4 (aging population) during the 20th century

• Can we assume it’s only a matter of time in the less developed countries?