WORLD VIEWS
&
HUMAN POPULATION
WORLD VIEW

HOW AN INDIVIDUAL THINKS EARTH’S NATURAL RESOURCES SHOULD BE USED BY HUMANS.

THERE ARE 2 TYPES:
CORNUCOPIANISM & ENVIRONMENTALISM
NATURAL RESOURCES

ANY MATERIALS TAKEN FROM THE EARTH & USED BY MAN.

EXAMPLES: fossil fuels, air, soil, water, plants, animals, metals
CORNUCOPIANISM

THE COMMON BELIEF THAT THE WORLD AND ITS NATURAL RESOURCES ARE TO BE USED AND EXPLOITED BY MAN FOR THE BENEFIT OF MANKIND.
ENVIRONMENTALISM

THE BELIEF THAT THE WORLD AND ITS NATURAL RESOURCES ARE LIMITED AND MUST BE PROTECTED AND USED IN A SUSTAINABLE MANNER.
EXPLOITATION

OVERUSE AND ABUSE OF RESOURCES FOR OUR BENEFIT.

Examples:
- the use of gill nets to catch fish
- throwing away bottles, cans and paper
- letting water drip from a faucet
SUSTAINABILITY

USING RESOURCES IN A WAY THAT ALLOWS THEM TO LAST LONGER.

Examples:

- the use of fishing lines to reduce by-catch
- recycling bottles, cans and paper
- fixing the leaky faucet
TECHNOLOGY

THE USE OF SCIENTIFIC INFORMATION TO SOLVE SOCIETY’S PROBLEMS AND DEVELOP NEW PROCESSES OR PRODUCTS.

Examples: refrigeration, transportation, antibiotics, plastic, sunscreen, contact lenses, clothing, electricity, sewage pipes, TV, etc……
CORNUCOPIAN vs. ENVIRONMENTALIST

RESOURCE USE

C: USE RESOURCES UNTIL THEY ARE GONE. TECHNOLOGY WILL FIND OTHERS TO USE LATER.

E: CONSERVE & PROTECT RESOURCES FOR FUTURE. WE MAY NOT FIND ANY ALTERNATIVES.
CORNUCOPIAN vs. ENVIRONMENTALIST

THE FUTURE

C: DEAL WITH PROBLEMS AS THEY ARISE. TECHNOLOGY WILL SOLVE PROBLEMS.

E: PREVENT POSSIBLE PROBLEMS. DON’T RELY ON TECHNOLOGY TO FIX THEM.
CORNUCOPIAN vs. ENVIRONMENTALIST

WHO BELIEVES

C: MODERN CIVILIZATION WESTERN/FIRST WORLD COUNTRIES

E: NATIVES/INDIANS WHO LIVE WITHIN THE ENVIRONMENT.
CURRENT WORLD POPULATION

OVER 7 BILLION

7,012,814,196

WORLD CLOCK
http://www.peterrussell.com/Odds/WorldClock.php
Vaccinations and modern medicine were important factors toward increasing the human population.
Second & Third World countries are increasing their populations at a faster rate.
Populations of Second & Third World countries make-up 4/5 of the World’s total population.
Asia has the highest population density. Followed by Africa, Europe, South & Central America, North America and Oceania.
3rd world people earn <$365 per year
2nd world people earn $365-$6000 per year
1st world people earn >$6000 per year
MAP OF FREEDOM - 2008
46% FREE
Have political &
civil liberties
90 COUNTRIES

18% partly free
Have liberties but
corrupt gov’t control
60 COUNTRIES

36% NOT free
Have no political &
few civil liberties
43 COUNTRIES
WORLD POPULATION TRENDS

DEVELOPING NATIONS: LARGE INCREASES DUE TO:

• BETTER MEDICINE – HIGHER SURVIVAL
• TECHNOLOGY FOR AGRICULTURE
• $$ FROM DEVELOPED COUNTRIES
WORLD POPULATION TRENDS

DEVELOPED NATIONS:
SMALL INCREASES DUE TO:

- BETTER MEDICINE - LONGEVITY
- NEED $$$ FOR LUXURY ITEMS
- MODERN LIFE — NO NEED FOR BIG FAMILY
LIMITING FACTORS

CONDITIONS WHICH CONTROL A POPULATION OF ORGANISMS

• BIRTH / DEATH RATES
• DISEASE
• PREDATOR / PREY RELATIONSHIPS
• CLIMATE / WEATHER
• FOOD / WATER AVAILABILITY
CARRYING CAPACITY

THE MAXIMUM POPULATION OF A SPECIES THE ENVIRONMENT CAN MAINTAIN.

IF EXCEEDED THE POPULATION WILL “CRASH” OR DECREASE RAPIDLY.
CARRYING CAPACITY

HUMAN POPULATION MAY DOUBLE WITHIN 100 YEARS TO 14 BILLION.

WHAT IS THE CARRYING CAPACITY OF EARTH FOR HUMANS?
WE DON’T KNOW!
Haiti – La Citadel ’88
Peru – Amazonian Home '97
Peru '97
Amazon School House
Belize – planting crops ’98
corn, beans & squash
Belize '98 School House
Ngorongoro Crater - Tanzania
Favela - Brazil '09
AGRARIAN SOCIETY
VS
INDUSTRIAL SOCIETY
Second & Third World regions are increasing their populations at a faster rate.
AGRARIAN SOCIETY

ECONOMY BASED ON AGRICULTURE

GENERALLY POORER, 3rd WORLD COUNTRIES
INDUSTRIAL SOCIETY

ECONOMY BASED ON PRODUCTS & SERVICES

GENERALLY RICHER,
1st WORLD COUNTRIES
Third World countries have highest birth rate
AGRARIAN FAMILY SIZE

FAMILIES TEND TO BE LARGE

NEED CHILDREN TO WORK ON THE FAMILY FARM

CHILDREN BRING MONEY TO THE FAMILY
INDUSTRIAL FAMILY SIZE

FAMILIES TEND TO BE SMALL

CHILDREN CAN NOT WORK
(CHILD LABOR LAWS)

CHILDREN COST MONEY
EXPENSIVE TO PROVIDE FOR
EXTENDED FAMILY LIVES ON THE FARM

OLDEST SON INHERITS THE FARM – TAKES CARE OF ELDERS
INDUSTRIAL ELDERLY CARE

PARENTS HAVE RETIREMENT & MEDICAL BENEFITS – NO NEED FOR CHILDREN’S CARE

LIVE IN NURSING HOMES - NOT A “BURDEN” TO THEIR CHILDREN
As literacy increases, the birth rate decreases.
AGRARIAN EDUCATION

GIRLS ARE NOT EDUCATED IN SCHOOL – TAUGHT HOW TO MANAGE THE FARM & RAISE CHILDREN

BOYS ARE SENT TO SCHOOL IF THE FAMILY CAN AFFORD IT
ALL CHILDREN ARE EDUCATED EQUALLY.

WOMEN HAVE CAREERS AND PUT OFF HAVING FAMILIES UNTIL LATER YEARS
FEMALE CONTRACEPTIVE USE

- Use of birth control is lowest in Africa
- Use of birth control is highest in developed areas with gov’t support.
CONTRACEPTIVES (birth control) ARE NOT WIDELY AVAILABLE OR EXPENSIVE.

RELIGIOUS BELIEFS PREVENT USING CONTRACEPTIVES OR ABORTION.
CONTRACEPTIVES ARE WIDELY AVAILABLE & AFFORDABLE

ECONOMIC PRESSURE TO SUPPORT CHILDREN KEEPS FAMILIES SMALL
GOVERNMENT CONTROLS ON FAMILY PLANNING

UNITED STATES

SMALL TAX BREAK FOR KIDS

WELFARE GIVES $ IF NEEDED

GOV’T HAS LIMITED CONTROL ON FAMILY PLANNING
GOVERNMENT CONTROLS ON FAMILY PLANNING

THAILAND

DISTRIBUTED CONTRACEPTIVES

FERTILITY RATE DROPPED FROM 7 TO 2 CHILDREN IN 40 YEARS
GOVERNMENT CONTROLS ON FAMILY PLANNING

CHINA

MADE INCENTIVES & PENALTIES TO REDUCE FERTILITY RATE

FERTILITY RATE DROPPED FROM 4.5 IN 1970 TO 2.3 IN 1990
The choice of how many children to have is always made within the context of a person’s economic, social and cultural climate. Thus fertility rates change with those factors quite apart from any plan or intent on the part of governments. For example, in the U.S. there was a conspicuous drop in fertility during the Great Depression of the 1930’s and a marked increase in fertility, the baby boom, following WWII (1947-1960). Recognizing this fact, many governments have made and continue to make conscious attempts to influence fertility by providing various economic incentives (or disincentives) toward having more or fewer children. The U.S. income tax deduction for each child may be seen as an economic incentive, albeit small, toward having children.
A ban on abortions is typically used by governments that want to increase their populations. Now Third World governments are increasingly turning toward economic incentives and disincentives for limiting population growth. At what point such measures are seen as outright coercion or undue meddling in the private lives of people is a matter of debate and opinion.

China, with its current population of 1.2 billion offers the most comprehensive example of extensive economic incentives and disincentives for reducing population growth. Some years ago, China’s leaders recognized that, unless population growth was stemmed, the country would be unable to live within its resource limits.
Because of inevitable population momentum, the leaders felt the country could not even afford a fertility of two, they set a goal of a one-child family and to achieve that goal; they instituted an elaborate array of incentives and deterrents. The prime incentives are as follows:

- paid leave to women who have fertility-related operations, namely sterilization or abortion procedures.
- a monthly subsidy to one-child families
- job priority for only children
- additional food rations for only children
- housing preferences for single-child families
- preferential medical care to parents whose only child is a girl. (there is a strong preference for sons in China, & parents generally wish to have children until at least one son is born)
Penalties for an excessive number of children in China include the following:

- repayment to the government of bonuses received for the first child if a second is born

- payment of a tax for a second child

- payment of higher prices for food for a second child

- denial of maternity leave and paid medical expenses after the first child.
Along with improving economic opportunities, these incentives and deterrents have helped China achieve a precipitous drop in its fertility rate, from about 4.5 in the mid-1970s to 2.3 currently. (The one-child policy has not been consistently promoted in many rural areas; therefore fertility in these areas offsets a fertility below 2 in cities)

We may consider the measures taken by China to be bordering on coercion. If you were a leading politician faced with China’s problems, what would you do?
CHINA’S INCENTIVES

JOB PRIORITY FOR ONLY CHILDREN
BETTER HOUSING FOR 1 CHILD FAMILIES
MORE FOOD FOR ONLY CHILDREN
PAID LEAVE FOR ABORTION/STERILIZATION
BETTER MEDICAL IF CHILD IS A GIRL
EXTRA $ TO 1 CHILD FAMILIES
CHINA’S PENALTIES

REPAY GOV’T IF A SECOND CHILD IS BORN
PAY A TAX ON SECOND CHILD
HIGHER FOOD PRICES FOR SECOND CHILD
DENIAL OF PAID LEAVE
DENIAL OF MEDICAL FOR SECOND CHILD
BETTER HOUSING COULD BE LOST