The World as 20 People
The Global Distribution of People, Consumption and Emission

North America (the United States and Canada) has 14% of the world's land area but has only 5% of its population. In North America, 75% of the population lives in urban areas. Less than 33% of the region is agricultural. The region consumes about 40% of the world's natural resources. North American population growth rate is the highest among the industrialized regions. At $28,230, North American Gross National Product per capita[1] is the highest of any region in the world.

Latin America (representing the dozens of countries in the Caribbean, Central, and South America) has 16% of the world's land area, but has 9% of the world's population. In Latin America, 75% of the population is urban, and 33% of the land is agricultural. Latin America has two of the five largest cities in the world, São Paulo and Mexico City. The GNP per capita is $3,880.

Africa (including 57 countries) has 23% of the land area, but has only 13% of the world's population. In Africa, about 1/3 of the population is urban, and slightly over 1/3 of the land is agricultural. One out of eight people in the world live in Africa. The population growth rate is the highest in the world and women average nearly six children each. Africa has the lowest literacy rate in the world; less than 50% of women can read and write. The African GNP per capita is $670.

Europe (with 47 countries including Russia) contains 12% of the world's people and currently has the lowest birth rate of any region in world history. It is the only region that has a higher death rate than birth rate. Europe has 17% of the land area of the world, and about 75% of the population is urban. GNP per capita is $13,420.

Asia (excluding China) is the most populous region of the world. It has 16% of the land area, but has 40% of the world's population. In Asia, over 1/3 of the population is urban, and over 50% of the land is agricultural. This diverse region includes one of the world's poorest countries, Bangladesh, and one of the richest, Japan. The GNP per capita is $2,910.

China is the country with the largest population in the world. One out of five people in the world is Chinese. China has 7% of the land area in the world - almost 1/3 of the population is urban, and 50% of the land is agricultural. Despite government legislation that restricts family size to one child, the population is still increasing steadily. With a GNP per capita of $750, it is one of the poorest countries in the world.

[1] Gross National Product (GNP) is an indicator of the standard of living in a country or region. Per capita GNP measures this per person.

Per capita daily calorie consumption is represented by peanuts. Each peanut represents 400 calories consumed per day.

Per capita GNP is represented by chocolate kisses. The total value of all the goods and services produced in a region divided by the population of the region. Each chocolate kiss represents $500.

Per capita Energy Consumption – Each piece represents 2 barrels of oil used per capita.

Per capita CO2 emissions – Each black balloon represents 1 metric ton of annual CO2 emission per capita

Data Table

	North America	Latin America	Africa	Europe	Asia excl. China	China
2000 Population (millions)	306	518	800	728	2,420	1,264.5
Natural Increase %	0.6	1.8	2.4	-0.1	1.7	0.9
Doubling Time (yrs)	124	39	29	-	40	79
Total Fertility Rate	2	2.8	5.3	1.4	3.3	1.8
Land Area, % Total	14	16	23	17	16	7
% Urban	5	9	13	12	40	21
Agricultural Land, % Total	30	38	37	22	50	57
GNP, $/capita	$28,230	$3,880	$670	$13,420	$2,910	$750
Calories/ person/day	3,698	2,792	2,439	3,217	2,699	2,972
Energy Cnsmt. (oil barrels/ capita)	51	7	3	26	6	4
Solid Waste CO2 Emis/capita (metric tons)	20	4	1	9	2	3
% pop. w/access to safe drinking water	100	79	47	100	71	75
Infant Mortality Rate (1000 births)	7	35	88	9	64	31
Est. Population in 2025 (millions)	374	703	1258	714	3,292	1,431

Sources:
World Population Data Sheet (Population Reference Bureau, 2000): 2025 population, natural increase, doubling time, total fertility rate, life expectancy, % urban, per capita GNP, land area % total, % total population
Food and Agriculture Organization (FAO): calories/person/day, % domesticated land
World Resources Institute: energy consumption, CO2 emissions
World Bank: access to safe water

Scenario

News Headline! – All the countries in the world agree that greenhouse gases are driving global warming. Everyone understands the consequences of global warming, and that we have 10 years to make dramatic changes in our live styles before we reach a tipping point beyond which impacts are beyond our ability to control.

- Sea level rise of ~2 ft or more by 2100, and perhaps much more, if Greenland/Antarctic melting accelerates (total melting of Greenland would raise sea level by 7 m, or ~21 ft – not likely to happen quickly, but current research is showing that processes seem to be happening that may speed sea level rise dramatically from the 2 ft formerly predicted), threatening coastal populations, and ~50% or more of the world's population lives at or near sea level.
- More intense storms leading to more frequent flooding
- Spread of tropical disease to higher latitudes and higher altitudes
- Widespread drought in some areas (such as the front range of the Rockies)
- Massive heat waves
- Lack of potable water
- Rapid change in land appropriate for agriculture (arable land in the US will move northward, into Canada)
- Damage to forests ecosystems (pine beetle, climate changing to quickly for trees to adapt)
- Damage or loss of some species (polar bears, penguins, etc, climate changing to quickly for animals to adapt)
- Damage to infrastructure at high latitude which depends on permafrost

<u>Some Points for Discussion</u>

Does our faith give us any guidance on how to respond to this scenario?

How do we feel about this?

What do we, as a global community, do about this?