



## The State of the Planet



### *Introduction*

Since the first of time, before our ancestors even thought of time, first light reveals a treasure almost beyond imagination – the elegance of diversity and the rich tapestry of the natural world. Ours is also a world shaped by people, by those who are strongly tied to the land and who draw from its bounty. They suffered during hard times, only to be renewed by the birth of each new generation.

This is also a place our ancestors never could have dreamed of with mega-cities of glass and steel, the home to expanding populations, powered by a global economy, and fueled by never ending images of consumption. Even when the sun gives way to the glow of neon, we've found a way to continue the frenzy – a way to freeze time – until we reach the very edge of night. Yet all too often first light brings a more sobering reality – perhaps all is not well with the state of the planet.

**“If I had to use one word to describe the environmental state of the planet right now, I think I would say precarious. It isn’t doomed. It isn’t certainly headed toward disaster. But it’s in a very precarious situation right now.”**

— Robert Engelman, Population Action International

In many ways the most important challenge to the state of the planet is recognizing the seriousness of the problems that lie ahead. How could this have happened? How could our planet be faced with seemingly unprecedented environmental challenges? Perhaps it's best to start with numbers – numbers that have literally shaped the human condition.

From the time of our prehistoric ancestors, it took until about 1800 for our planet's population to reach one billion people. It took another 125 years to reach 2 billion – less than 50 years to reach 4 billion – and only 25 years more years to reach six billion people. Incredibly, the world's population grew more in the past fifty years than in the preceding 4 million years. Today our numbers have surged to nearly six and half billion and our population is increasing by nearly 80 million people each year – 220,000 each day.

In the end, all we want is for first light to still reveal the rich tapestry of the natural world and, with each new day, a chance for every child born into poverty to share the same dreams we in the West so often take for granted.



What we need are the efforts of people everywhere – all those who are willing to find ways to strike the right balance between what we want and what nature can provide.

Though separated by distance and culture, for the six and a half billion people who draw sustenance from the resources of the world, there are common bonds. Each generation brings new ideas, new attitudes, and new hope to renew these bonds.



***Explore the program chapters:***

- Population Pressures
  - From the time of our prehistoric ancestors, it took until about 1800 for our planet's population to reach one billion people. It took another 125 years to reach 2 billion, less than 50 years to reach 4 billion, and only 25 years more years to reach six billion people. Incredibly, the world's population grew more in the past fifty years than in the preceding 4 million years.
- Water Crisis
  - Though our planet is covered by an extraordinary amount of water – over 97 percent is undrinkable seawater and another 2% is locked-up in our polar ice caps. many of our planet's greatest rivers are in danger of running dry. That includes the Amu Darya -- the Nile --the Colorado -- the Mekong and the Yellow River. In a world where the demand for water doubles every 20 years -- this doesn't bode well for the state of our planet -- especially in the cities of the world.
- Urban Problems
  - For the first time the urban population of our planet outnumbers those living in rural areas. In 1950 there were 86 cities with a population over one million. Today there are more than 400. Within ten years 600 cities will each be home to over a million people.
- Haiti
  - Haiti is the Western Hemisphere's poorest country and suffers from severe economic depression and political instability. In the slums of Port-au-Prince, the nation's capital – a quarter of a million Haitians are at the mercy of local gang members who control all forms of commerce -- including the sale and distribution of safe drinking water. Life expectancy is almost thirty years less than children born in the United States.



- Zimbabwe
  - In a remote corner of Zimbabwe, in Southern Africa, during the dry season it may not rain for months. Watering holes and grasslands disappear. Elephants invade farms and pastures in search of food. An unforgiving sun turns villages into dusty wastelands. Seasonal drought has always been part of this nation's history. But when the rains don't come most farm families are forced to struggle with hunger -- sometimes famine -- as their tiny plots of land turn brown. Yet there are communities in Zimbabwe that have found ways to cope with the lack of rain. In the village of Chinamora, singing is a way to share in the joy of the harvest and the small miracles that come with water. For the past ten years the women who tend this communal farm have prospered -- even during times of severe drought. It happened because an elementary school principal decided to build a small dam.
- Mexico/U.S. Border
  - The Rio Grande River marks much of the twelve hundred mile border between Mexico and Texas. For those living in one of the most arid regions of North America -- the Rio Grande has always been a primary source of water, even in times of drought. Fifty years ago the Mexican and United States governments built the Falcon Dam across the Rio Grande. They also created a huge reservoir that was suppose to supply the region's water needs well into the 21st century. But, in the five decades since the dam was built, much has happened in the Rio Grande Valley. New cities sprang up on both sides of the border. Commerce flourished -- and as the population exploded from 200,000 to 20 million -- the demand for water increased.
- Wetlands
  - Another casualty in the global competition for water is the world's wetlands. Fed by the seasonal flow of streams and rivers, this is a rich habitat for thousands of species of plants and animals -- with it's own sense of time and rhythm. Once covering 12% of the planet's land area, today half the world's wetlands are gone -- victims of rivers running dry or their conversion to farmland or human settlements. Gone are irreplaceable breeding grounds for plants and animals. Gone are aquatic ecosystems that cleansed a river's water. Gone are woodlands that eased the burden of floods.
- Depleting Aquifers
  - The depletion of water resources is not limited to poorer countries. Fly over the prairies of the United States and you'll see thousands of dark circles etched into the desert landscape. Each circle is cultivated land -- irrigated with water pumped from the largest aquifer in the world. Called the Ogallala Aquifer, it supplies water to 25 percent of the country's irrigated land. It helped make the Great Plains the breadbasket of the world. During the time of harvest -- farmers work round the clock. In return, they manage to produce more than a third of the world's grain exports. But in a sense, farmers are also exporting our country's only irreplaceable source of water. It's not an easy trade-off.
- Food Problems
  - If you were to visit the food markets of the world -- one thing would be immediately apparent. More food is available to more people than ever before. It's a testament to the ingenuity of the world's farmers, ranchers and fishermen. Despite the global abundance of food -- more than 800 million people go hungry each day. Compounding the problem, hunger frequently leads to a cycle of environmental decline. Desperation can leave the land over-cultivated and over-grazed.



- Climate Change
  - A few years ago, Chicago was at the epicenter of an extraordinary weather event. Almost seven hundred and fifty people died -- thousands more were hospitalized. The victims did not suffer from a terrorist attack or an industrial gas release. Their deaths were due to a dramatic and unprecedented ten-day heat wave. The scientific community now tells us that we all live in a world where the level of carbon dioxide in the atmosphere is higher than it has been for hundreds of thousands of years -- and global temperatures are rising faster than at any other time in recorded history. The consequences of these human induced changes are becoming more and more profound.



#### **Points of View:**

##### **Eugene Linden, Author/Journalist**

I think that the Earth has been sending us distress signals and the distress signals have to do with the pressures of human population and the pressures of the human economy on the ecosystems.

##### **Tom Lovejoy, The Heinz Center**

If current trends continue, by 2050 something on the order of a third or 40% of all species will either have become extinct or will be on the threshold of going extinct.

##### **Peter Gleick, Pacific Institute**

More than a billion people don't have access to safe drinking water. 2.6 billion people, almost, almost half the world's population doesn't have access to adequate sanitation services.

##### **Rajul Pandya-Lorch, International Food Policy Research Institute**

More than 130 million children who are under the age of five will still remain malnourished by 2020.

##### **Lester Brown, Earth Policy Institute**

We are in effect, outgrowing the Earth. We need another planet but there's no other habitable planet that we can go to

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