

Symposiets teman

I. One Living Planet

Our planet is unique because it is clothed in a complex web of life. Destruction or disruption in one part affects the whole. The damaging impact of human activity is now reflected throughout the biosphere. To reverse this damage, we must change our relationship with the earth, committing to the principles of interdependence which are common to both religion and science. A planet in jeopardy requires new paradigms for thinking about the environment.

1. Physical Interdependence: One Living Planet
2. Spiritual Interdependence: The Eternal Covenant
3. The Intellectual Point: The Structure of Scientific Revolutions
4. The Physical Tipping Point: Climate Change in the Arctic

II. Damage to the Arctic Ecosystem

With its direct influence over the whole planet, the Pole is a powerful icon of the interconnectedness of humanity. This interdependence is highlighted through scientific evidence, but also through human experience. We shall examine four interconnected aspects of change in the Arctic. They are all the result of human activity elsewhere, and are further exacerbated by the changing climate. Each case will be considered in terms of the global context, the direct impacts witnessed in the region, and finally the human choices which originate and perpetuate the problems.

1) Contaminants

The Arctic is no longer a pristine wilderness. Chemicals produced in industrialised nations are carried north by air and water currents, and the Arctic acts as the final sink where persistent organic pollutants are trapped. The traditional foods of indigenous people are now unsafe. There is also radioactive contamination. Leakage and waste from nuclear power plants from Western Europe is carried to the Arctic Ocean, where there are also some 120 decommissioned nuclear submarines.

2) Energy

Growth in world population, increased demands for energy and continued reliance on non-renewable sources are having a major impact on the Arctic. The region holds 25% of the world's remaining hydrocarbons, the core agent of global warming. Ironically, as the Arctic ice melts it becomes easier to extract more oil and gas, further focusing commercial interest and activity. Nuclear energy, the alternative favoured by many, has brought its own set of problems to the region.

3) Biodiversity

The Arctic is home to some of the world's most distinctive mammals, millions of migratory and resident birds, a rich ice-edge community, and some of the world's major fisheries. The physical and biological impacts of a warmer climate on Arctic ecosystems will be tremendous, affecting nearly all marine- and land-based wildlife species. Even a few degrees increase in seawater temperature will affect the Arctic marine ecosystem in many ways. Warmer temperatures will lead to increased biological productivity at the lower parts of the marine ecosystem. Reductions in sea ice will drastically shrink marine habitat for polar bears,

ice-inhabiting seals, and some seabirds, pushing some species toward extinction. Caribou, reindeer and other land animals are likely to be increasingly stressed as climate change alters their access to food sources, breeding grounds, and migratory routes.

4) People

Human communities also survive in a delicate balance with the Arctic climate and are equally sensitive to change. Indigenous populations in the region maintain a strong connection to the environment through subsistence on wildlife and natural resources, a practice that has endured over thousands of years. Indigenous communities, whose knowledge of the land, sea, and ice dates back perhaps as many as 30,000 years, are already reporting signs of significant climatic change. Ice now forms later in the year and breaks up sooner. Changes in the ice pack alter travel routes over land and sea. Experienced hunters are falling through thinning ice into seawater cold enough to kill in minutes. Once-frozen coastlines are eroding, destroying homes.

Residents have observed changes in the animals around them, including caribou, polar bears, ringed seals, walrus, beluga whales, and seabirds, upon which the local people depend. The culture has relied on these animals for food, clothing, and various materials. Increasingly, they are noticing that polar bears cannot find seals along the receding ice edge and are forced to scavenge elsewhere for food. And robins and barn owls —birds for which the indigenous people had no name— have started to appear for the first time.

Thousands of years ago, nomadic Arctic populations adapted to environmental change by settling in favourable climate conditions along the paths of animal migration. Today, Arctic people cannot adapt as easily, because most now live in permanent settlements.

If climate change disrupts subsistence livelihoods in the Arctic, communities could face increased poverty, leading to drug and alcohol abuse and a host of other social problems. Such problems are already common in some areas, where traditional hunting and fishing based economies have given way to less reliable employment. The social and cultural impacts of a changing environment could be overwhelming.

In the Arctic, the traditions and lifestyle of indigenous peoples have been threatened and even destroyed as a result of the needs and demands of other parts of the world: oil and gas exploration, ozone depletion, acid rain, pollution from mining and timber production, and commercial fishing.

What happens to the Arctic and its human population concerns us all, for the response of the area and its people to climate change serves as an indicator for what may occur in other regions and to our planet as a whole. Arctic indigenous people, with their profound sense of spirituality, remind us that we are part of nature and not masters of it.

III. Alternative Reflections

When we look at the world now, we see the reflection of our own choices. The Arctic has a latent power to turn the harm it has been done back on to the rest of the planet. In many cases, it is in our power to make different choices, and to see as a result a different world.

1) Physical Reflections: the Threat to the Planet

- Rising sea levels
- Desertification
- Drought
- Climate refugees

2) Alternative Reflections

- Technologies
- Economics
- Perceptions
- Politics.

3) Religion, Science and the Environment