

## 4. AN ECOLOGICAL CRISIS?

### **What damage is being done to the life systems of the earth?**

The problems are connected. Many people are short of food, even though the earth can currently produce enough to feed everyone. Many people are also short of water. Attempts to produce more food for humans have sometimes caused a loss of soil and the destruction of other species. The by-products of industrial and agricultural processes sometimes cause an unhealthy environment for people and for other creatures, and in the industrialised societies large quantities of waste are produced. It is now widely accepted that the burning of fossil fuels is contributing to the warming of the planet.

### **How serious is it?**

It is estimated that 1 in 6 people suffer from hunger and malnutrition. A third of the world's population now lives in an area that is short of water, and that it is likely to increase to two thirds by 2025. Hazardous chemicals are now found in the bodies of all new-born babies and an estimated one in four people worldwide are exposed to unhealthy concentrations of air pollutants. The 2003 Red List of known species facing extinction included 12% of birds, 13% of all flowering plants and 25% of mammals. The Inter-governmental Panel on Climate Change has estimated that the average world temperature will probably rise between 1.8 and 4.4 degrees C in this century, and that a large part of that is the result of human activity. Temperature rises will cause rises in sea level, storms, severe flooding in some places and droughts in others.

### **How much of this is the result of human activity?**

Even without human beings the earth's eco-systems would not remain the same. Completely stable eco-systems do not exist. Life on earth has always been changing. There have always been species extinctions. But the impact of humans has been enormous. In biological terms, we are a very successful species, living in tropical regions, temperate zones, arid semi-deserts and in the arctic and our intelligence and language have given us enormous power to transform, rather than react to, our environment. They also give us the ability to be aware of the world around us and what we are doing to it.

### **How have our ways of living contributed to this damage?**

In many parts of England we have seen our local environments improve in the last forty years, but worldwide it is getting worse. Our burning of fossil fuels contributes to the increase in the amount of carbon dioxide in the atmosphere. The effect of this is gradual warming of the earth. This warming releases other gases like methane, which exacerbate it further. This

eventually could cause a rapid positive feedback system resulting in a rapid acceleration in global warming.

Importing food uses fossil fuel, as does exporting waste. Many hazardous processes no longer happen here but we are dependent on them happening elsewhere. For example our ships and planes are often dismantled in places where there are low standards of control, and local poverty means people live and work in conditions that damage their health. Where people are poor they generally have more children because the chances of survival are less, so while in Britain the population is only increasing through immigration, across the world it is increasing overall. And if everyone on the earth used up as much of its resources as we do in Britain we would need three earths to live on.

### **Is everyone agreed about these things?**

Among scientists, economists, politicians and journalists there is disagreement about the figures used in the analyses, the interpretation of the figures, the proposed solutions to the problems and the seriousness of the problems. For example, there is a consensus among climate scientists that the atmosphere is warming and that this will have a profound impact. But climate prediction is a complex and imprecise science, and not everyone agrees on the extent of the changes nor on the effect that human action is responsible. But there are few who would disagree with the suggestions that many of the world's people face acute shortages of the essentials for life and that these shortages are likely to get worse if nothing is done, that our way of living involves consuming materials which cannot be replaced, or that human life now has a profound impact on the other living creatures on the earth.

### **Surely environmental damage is not new?**

When the Israelites entered Canaan it was not literally 'flowing with milk and honey' but it was certainly a lot more fertile and with more woodland than it was by the time of Jesus. The ancient Greek stories tell of forests and glades, which are no longer there. Egypt was the breadbasket of the Roman Empire. The Scottish Highlands were a major producer of beef cattle before they were put over to sheep in the Highland Clearances. When being lobbied about the destruction of the Amazonian rainforest Brazilians correctly point out that Europe was once covered in forest too. Humans have always had an impact on their environment. But as technology has developed it has become more profound and more widespread.

### **What sort of difficulties will we face?**

If climate change happens as many climate scientists predict there are likely to be increased famines, permanent poverty, and mass migrations as land

becomes submerged or unusable for agriculture. It has been suggested that the unacknowledged cause of some wars is a struggle for scarce resources, and that this is likely to increase. Extreme weather conditions are expected, although the form of these is a matter of speculation. Britain could become warmer, but if the Gulf Stream changes its course, it could become colder and experience a continental climate. Significant changes such as these could cause drastic economic change and the increase of extreme political opinions. Other developments could cause other changes. Worst case scenarios include economic collapse, serious radiation leakage, nuclear terrorism and nuclear war.

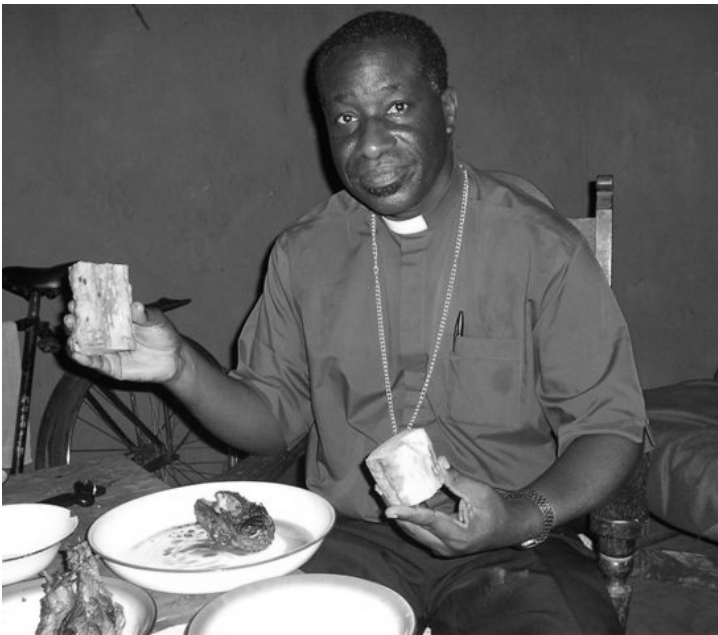
#### **What steps need to be taken to alter these trends?**

On the big scale there is disagreement. The Stern report makes recommendations for international

economics, and not surprisingly some people disagree with it. On the national level there are conflicts of interest: reducing food miles is not good for the haulage industry. Many people find themselves in a situation where they feel unable to make the changes even in their own lives which they would wish: parents in a small village might like to use their car less but their children would consequently become isolated and miss out on educational opportunities. There are no simple solutions. But while our faith might not give us solutions it can give us wisdom by which to live.

#### **Is this really a crisis?**

According to the Oxford English Dictionary a crisis is a turning point; a vitally important or decisive stage; a time of trouble or danger. That seems to be where we are.



#### **Climate Change in Zambia**

The rainy season in Zambia used to begin at the end of October and last until April at least. For the past few years it has not started until November, and has finished by March. Sometimes the rains are thin and patchy and not enough for the crops to grow – other times the rains are torrential and wash away the young crops. The growing season was very poor in early 2005, and Bishop William Muchombo of Eastern Zambia reported to us in November last year that in one village on his confirmation tour of the rural areas he had been given roots to eat for the main meal of the day. The roots are poisonous unless boiled for several hours – and have very little nutritional value even then.

Jenny Humphreys  
Diocesan Zambia Link

"We have to change our ways. The increasing cost and scarcity of fossil fuels, the high and damaging number of food miles as produce is transported all around the world and in particular the human cost to our communities require us to rethink values such as 'sustainability', 'stability', 'health' and 'well being.'  
We have received a wake up call - now is the time to act. "

Rt Revd Peter Price, Bishop of Bath and Wells  
December 2005