



Background information

The effects of global warming are already being felt today as extreme weather conditions such as droughts, flooding and hurricanes have increased. In the coming years they will occur more often and more forcefully.



The consequences of climate change will affect especially the poorest people in the developing countries. Those who are least responsible for these dramatic changes are

particularly vulnerable because they are highly dependent on natural resources. The people in the deltas and coastal areas of Africa, Asia and Central America are especially threatened by flooding due to the rise in sea level, whereas millions of others in the arid regions of Africa will suffer from diminishing harvests and scarce supplies of fresh water.

However, the poor in the South have been confronted with the problems of a lack of clean water, health care and income since long before the effects of climate change began. Poverty, hunger and the susceptibility to disease are rooted in existing social, economic and political structures of inequality. In other words, poverty and exclusion are reinforced but not created by climate change.

Climate change intensifies the global health crisis

This also applies to the connection between climate change and health. Only sluggish progress has been made in the Millennium Development Goals (MDGs) pertaining to health. Moreover, the effects of the global economic crisis are endangering the first positive trends and threatening to reverse them again for years to come. This is especially the case for child and maternal deaths and for the fight against the infectious diseases, tuberculosis, malaria and HIV/Aids.

The world community is called on to come to terms with the global health crisis and to act on it now! If we finally realise that the effects of climate change are inseparably connected with global development policies, then this must also apply for the health sector. Climate change increases social inequality, which in turn infringes on the right to good health and hits the vulnerable in particular, the groups of the poor who are already at a disadvantage or excluded from healthcare services: children, old people, women, refugees, the handicapped and those marginalised because of illness.

What the people can expect: five areas of concern

In its report on human development for 2007-2008 the UNDP (United Nations Development Programme) categorised five central problem areas arising from climate change. They will be mutually reinforcing as well in future. It becomes very clear that in one area climate change will have direct negative effects on human health; in the other areas the effects will be indirect.

The spreading of infections and disease

Now already, heat waves and extreme weather conditions are an additional burden on human health, even in the countries of the North. In the developing countries, as a consequence of water and food shortages caused by climate change, there will be a more rapid spread of disease, infections and opportunistic infections. For example, dengue fever has already become more common in recent years due to global warming and it will become even more frequent. The prognosis for malaria infections is shocking. BMZ (The German Federal Ministry for Economic Cooperation and Development) estimates that the number of people infected will increase by up to 80 million in the coming years.

The increasing occurrence of epidemic diseases is, however, only one factor in a complex configuration of the causes and results of climate change, all of which will give rise to further problems of social inequality. This is made clear by the prevalence of HIV/Aids: Because of existing discrimination patterns, women face considerably greater health risks than men in terms of their limited access to prevention, treatment and care.



Socio-cultural restrictions and an economic disadvantage put especially older women at risk. On the one hand, they are particularly vulnerable to health problems caused by climate conditions (heat and under-nourishment), yet on the other hand, they often take on the invisible but cumbersome daily tasks and care in the

families afflicted with HIV/Aids. The vicious circle of illness and marginalisation, of disregarded human rights and poverty – particularly in connection with health risks due to climate



conditions and the HIV/Aids epidemic – need to be analysed in terms of gender and age.

A threat to ecosystems and biodiversity



Climate change and its causes – greenhouse gases produced by the burning of fossil fuels and deforestation – are currently changing global ecosystems. A mere 2° of global warming would threaten about one

quarter of the world's animal and plant species with extinction.

A loss of biodiversity endangers the survival and health of more than 300 million people in indigenous and landless population groups who will lose their independence when they lose their entitlement to the forest and its products.

Agricultural production and food security

Rising temperatures, changed precipitation levels and droughts will have considerable effect on the food security of countries that depend on agriculture. Particularly in certain areas of sub-Saharan Africa crop yields could be reduced by up to 50% in the coming years. Crop losses and famine, in turn, mean additional workloads. Alternative sources of food and income must be sought and that means that children, too, will be required to carry a greater share of the burden. This brings increased strain on the people's health and eliminates any time for social activities. Malnutrition is fatal for those infected with HIV or suffering from Aids; they need sufficient food during their antiretroviral treatment because their body uses it up faster.

Water scarcity and unsure water supply

There are already over a billion people in poorer countries with only limited access to clean drinking water. Changing precipitation patterns and droughts are leading to a dramatic water shortage for about 350 to 600 million people in Africa as of the middle of this century. Hand in hand with the deterioration of water quality due to climate change and environmental destruction, there will be an increase in infectious diseases, which will put especially children at risk. Reduced sources of water usually also mean that women and girls have longer ways to go to get water (or firewood, fodder and food). Longer, more difficult and often dangerous ways

mean less time, and not infrequently, greater danger of sexual assault.

A rise in sea level and vulnerability to climatic disasters

The Intergovernmental Panel on Climate Change (IPCC) meanwhile predicts a rise in temperature of 1.1° to 6.4° Celsius by the end of the 21st century. Even if the time frame and the scale of this change are controversial, a rise in ocean temperatures and in sea level as a result of the melting polar caps is expected.

As a result, up to 500 million people could be forced to leave their homelands because of flooding. Over 300 million people still live in areas ever more frequently affected by hurricanes and tropical storms. The United Nations Development Programme (UNDP) says that if natural catastrophes and extreme storm conditions continue to increase as forecast, about a billion people in developing countries are under severe threat. The irreversible loss of the place they live, their fields, their community, and all of their possessions will increase the stream of migrants and refugees. That in turn will have a massive effect on the health and security of the people involved. There is an acute need for political action on this because basic human rights, including the right to health must be ensured. Even now climate change is threatening arduously achieved progress in the field of social development and international efforts to ensure decent living conditions in developing countries. Progress has been made in that climate change is meanwhile considered an all-embracing factor in development policy and that the international community is starting to integrate ambitious climate protection measures reducing carbon dioxide emissions (mitigation), and measures to adapt to climate change.

Of equal importance, however, is that climate protection and adaptation must in future be combined with effective anti-poverty measures and the right to social development and health. The course must be set for greater awareness of the effects of climate change on health. A first step in putting international health objectives and also the fight against HIV/Aids on the agenda of international climate negotiations might be to found an international group of experts to begin research work and advisory support for political decision-makers immediately, as suggested by the Lancet Commission*.

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* The UCL Lancet Commission (University College London Institute for Global Health Commission)