

4 the Environmental crisis

threats to HEALTH

and ways forward

by Niclas Hallstrom

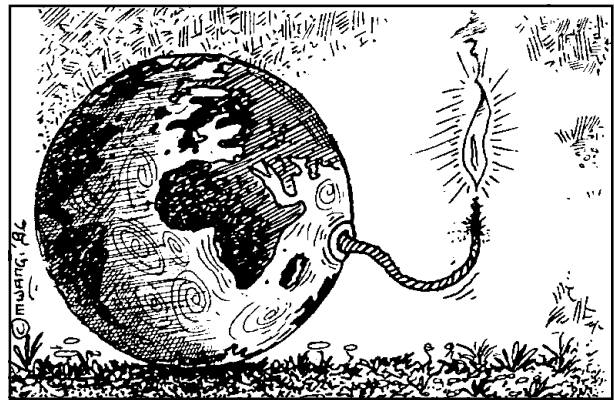
INTRODUCTION

The world is currently facing an unprecedented health and environmental crisis. Despite progress in both the health and the environment fields, the situation is approaching the brink of global disaster. So extensive and far-reaching are the problems that the future well-being of humanity, together with that of many other life forms on the planet, is in jeopardy. On one level, individuals and communities—especially those who are poorest, most marginalised and suffering the most discrimination—are facing the direct consequences of *local* environmental destruction, which often result from exploitative business practices and destructive development projects. Those who are worst-off pay with their health for the destruction of their local environment.

On another level, people all over the world are beginning to be affected by *regional* and *global* environmental changes. These drastic environmental problems, e.g. the changing climate and the depletion of the ozone layer, are mainly the result of unsustainable lifestyles, overconsumption and unhealthy patterns of development. Also these environmental problems are likely to hit the poor and marginalised first—and with the most drastic consequences—but will sooner or later also affect the privileged. Unless curbed (through wide-ranging, structural changes) these global environmental trends threaten to cause havoc to whole ecosystems and essential life-supporting systems. This may in turn lead to an immense, unprecedented crisis for the whole of humanity.

It is thus of utmost relevance for everyone involved in the People's Health Assembly to understand the links and interconnections between health, the environment as well as underlying factors such as social, political and economic structures which determine the current patterns of development. Ultimately, the health and environment crisis relates to issues of social justice.

Analysing health in an ecological and environmental framework calls for a broad, intersectoral, holistic understanding of health. It shows how



circular on habitat, may 1996

many of the pressing health and environmental problems of today share the same root causes and the same barriers to being effectively tackled and solved. It encourages a long-term perspective on health and its future challenges. And it provides, through the experiences of the environmental movement, exciting examples of how people—or 'civil society'—can successfully influence current thinking and policies.

To achieve environmentally sustainable societies will require drastic changes in the current world order and the formulation of alternative ways of thinking. Within the environmental movement there is a huge wealth of ideas, experience and visions of what an alternative—just, environmentally sustainable and people-oriented—society would look like. The health movement can draw on this experience while, on the other hand, influencing the environmental movement to incorporate human health into their analyses and actions. A closer integration of the health and environmental movements is essential to counter the present environmentally destructive and exploitative course of development. In order to solve the current crisis, *both* humans and the environment must be taken into full account.

the ENVIRONMENT and health

Evolution and characteristics of environmental problems

The destruction of the environment has always been part of the human story. Throughout time, environmental problems have been some of the most important factors affecting people's health, both on the individual and the community level. Floods, plagues and the environmental consequences of war have continuously led to ill health and premature death.*

However, as the scale of human societies has steadily increased and technology has developed ever faster, the pressure on the environment has likewise increased enormously. Fuelled, by a runaway global economic system—which has created both unprecedented affluence (overconsumption) and enormous levels of poverty—environmental deterioration now threaten to increase inequalities and cause irreversible harm to ecosystems on a *global* scale.

While many environmental problems remain *immediate*, local problems whose causes may be relatively easy to understand and for which solutions can be identified (although not necessarily easy to implement), many others are incredibly complex and difficult to handle. These involve much uncertainty, affect whole continents or even the whole earth, and are the combined result of millions or billions of people's behaviours. They are often deeply embedded in societal structures maintained by powerful interests. Even worse, many of the current problems cause *irreversible* damage, so we cannot afford to make certain mistakes even once! Moreover, there may be a considerable time lag between the harmful action and the visible effects.

The history of the environment is partly a story of unpredictable, unexpected problems. Often, environmental abuses are absorbed until a threshold is crossed and a catastrophe results. At this stage it may be too late, or more costly, to reverse the damage. There is no reason to believe that the future does not have new unpleasant surprises in store.

Environmental threats to health

Degradation of the environment threatens health both directly and indirectly; and both immediately and in the long term.

The environmental problems we most easily observe are those with *immediate* and *direct* effects. People—and mostly the poorest and the marginalised—get sick from drinking polluted water, eat contaminated food, suffer from exposure to polluted air and poisonous chemicals, and spend much of their time in harmful working conditions.

People's health suffers in *immediate* and *indirect* ways from, for example, food shortages caused by the environmental degradation of both farmland and forests. Environmental refugees—people who have been forced to leave their homes because of the destruction of their local environment—often suffer severe hardships and are prone to ill health. Many people are also being killed or maimed in wars fought over scarce natural resources. Accidents resulting from environmentally induced natural disasters, such as floods caused by the destruction of forests, are another example of the immediate and indirect effects of environmental degradation.

Many environmental threats to health have *direct, long-term (delayed)* effects about which awareness may be slow to develop. For example, cancer is increasing rapidly in all areas of the world, largely as a result of exposure to pesticides, carcinogenic chemical substances included in the goods we consume, and increased exposure to various forms of radiation. These threats concern every person on the planet, although we might not even know what is making us sick and where it is coming from. Toxic substances accumulate in our bodies and are mixed in new and potentially lethal ways. Ill health may result several decades after exposure.

Yet, the possible *indirect* effects of environmental change in the *long term* may pose some of the most alarming threats to human health. The disturbance of the world's climate due to enhanced global warming is already underway, and may cause severe damage to health. Droughts and floods could kill millions of people and introduce



* Indeed, since the beginning of agriculture many human societies seem to have perished as a result of overwhelming environmental problems caused by over-use and pollution of natural resources. For example, 4,000 years ago the early civilisation of Mesopotamia may have collapsed because people over-irrigated their fields (making the soil excessively salty), while 1,000 years ago the Mayan civilisation may have perished due to deforestation and soil erosion.¹

new epidemics. New scarcity of valuable resources might increase tensions and lead to drastic increases in wars and violent conflicts. Perhaps worst of all, whole regions may lose much of their capacity to grow food. Furthermore, global environmental change ultimately threatens to destabilise our social and economic systems, which in turn play important roles for people's health—through society's ability to provide employment, a healthy social environment and appropriate health services.

Some food for thought

Natural history tells us that 99% of all the species ever to have evolved on earth are now extinct. What guarantees that *homo sapiens* will be one of those few evolutionary successful species that survives? Are we in fact rushing to ensure we join the other 99%? And if so, what can we do to turn the tide?

Table 1: Possible health effects of environmental degradation

Root/underlying Causes	Env'l change	Manifestation	Type (direct, indirect) and timing (early, late) of adverse health effects			
			Direct, early	Direct, late	Indirect, early	Indirect, late
Exploitation of people and nature; egoistic behaviour and self-interest Underlying views on nature, progress and development Growth-centred development	<i>Enhanced greenhouse effect</i>	Global warming and other climatic change	Heatwave-related illness and death		Extension of vector-borne infections	Altered viability of (edible) fish in warmed oceans
		Sea-level rise	Natural disasters: cyclones, floods, landslides, fires Increased risk of flash floods and surges	Inundation → social disorder, impaired sanitation, farmland loss	Food shortages due to impaired agriculture Consequences of damage to foreshore facilities, roads etc.	Destruction of wetlands → decline in fish stocks
Over-consumption/ Affluence	<i>Stratospheric ozone depletion</i>	Increased UV-B flux at Earth's surface	Sunburn, conjunctivitis Suppression of immune system → increased risk of infection	Skin cancer Ocular effects: cataracts, pterygium		Impaired growth of food crops and of marine micro-organisms base of aquatic food web)
Failure of neo-classical economic theory to account for true environmental costs	<i>Acid aerosols (from burning of sulphurous fossil fuels)</i>	Acid rain	Effects on respiratory system		Aquatic damage (reduced fish) Impaired growth of crops	Impaired forest growth → reduced ecosystem productivity
Corporate concentration/ Profit maximisation Impaired long-term vision	<i>Land degradation: intensive agriculture, overgrazing</i>	Erosion, sterility, nutrient loss, salinity, desertification	Decline in agricultural productivity	Rural sector depression → migration to fringes of cities (see bottom row)	Exposure to pesticides and fertilisers (may also cause algal blooms)	Consequences of silting up of dams and rivers
		Depletion of underground aquifers	Lack of water for drinking and hygiene	Decline in agricultural productivity		
Scale; no direct feedback between cause and effect	<i>Loss of biodiversity</i>	Destruction of habitat	Deforestation → disruption of local culture	Loss of potentially edible species		Deforestation → greenhouse enhancement
		Loss of genetic diversity; weakening of ecosystems			Loss of medicinals, and other health-supporting materials	Greater vulnerability of crops and livestock. Reduced vitality of ecosystems
	<i>Effects of poverty and crowded living conditions</i>	Crowded urban slums	Infections Malnutrition Homelessness Antisocial behaviours	Social disorder Chronic toxic effects of environmental pollutants		Consequences of overload of local ecosystems

Table adapted from the table "Possible adverse effects upon human health caused by global environmental changes" in McMichael, A.J. 1993. *Planetary Overload: Global Environmental Change and the Health of the Human Species*. Cambridge: Cambridge University Press (p. 4-5).

Root causes of the ENVIRONMENT and health CRISIS

Like so many other aspects of the health crisis, many of the root causes behind environment and health problems can be traced to the current dominant development model, the global economic system, and the grave injustices associated with these.” Several factors can be identified.

View of development and progress

The notion of ‘progress’ underlies much of what has become mainstream Western development thinking, which dominates views among the elites as well as many ordinary people around the world. The idea of progress, which emerged in the 18th century in Europe during the Enlightenment, introduced the view that history was a staircase of constant improvements and increasingly advanced stages. Not surprisingly, Europe placed its own culture at the top, and the European experience came to be seen as the norm which all other—‘backward’—societies would eventually follow. The uniqueness of each culture was ignored.

The Enlightenment also drastically altered the existing views on nature and the relationship between human beings and nature. The metaphor of nature as a mechanical, clockwork construction, which could be fully understood by dividing it into minuscule pieces, and the view of nature (except humans) as inert, and existing only to be exploited maximally by humans, gained acceptance and legitimised 300 years of large-scale extraction and abuse of the environment.

It is from this tradition that the mainstream understanding of ‘development’ and ‘globalisation’ stems: the view of a universal, linear, predetermined pattern of societal change where different societies all take part in the same race towards industrialisation and ever-increasing wealth. And it is from this very same tradition that today’s dominant economic theories emerge.

Outdated economic thinking

Unfortunately, all dominant economic theories fail to take into account the environmental concerns and long-term

sustainability of society. The established economic theories—which guide decision-makers from all over the world and from most kinds of ideological backgrounds—regard the economic system in isolation from ecosystems. As ecological services are not owned, their degradation and abuse are not accounted for and consequently neither show up in GDP nor function as disincentives to continued exploitation. In fact, environmental destruction usually *improves* the look of the national accounts, since all economic activity (destructive, as well as constructive) add to the gross domestic product while none of the reduced carrying capacity of the ecosystem is taken into account. Thus, the economic activity following both the Bhopal gas accident and the Chernobyl nuclear disaster improved the national accounting in India and the USSR respectively, although considerable real natural wealth and human lives were destroyed. The dominant economic theory has explicitly encouraged excessive extraction, consumption and waste—all in the exalted cause of expanding the. The failure of mainstream economics to consider environmental constraints is clearly one of the most serious causes of the present environment and health crisis.

Excessive focus on economic growth

Built into the established economic theories is a supposition that unending economic growth is both possible and desirable. In fact, growth and increasing consumption are two of the main objectives of capitalism. Yet, from an environmental perspective, this excessive focus on economic growth is both undesirable and unrealistic, especially in the rich, industrialised countries. It is impossible for the world economy to grow its way out of poverty and environmental degradation. Instead, wealth must be redistributed and the world’s economic systems be kept at a sustainable level. Exponential growth is impossible in the long run.

Rather than hoping for everlasting economic growth—which will unavoidably lead to increasing burdens on the earth’s already strained ecosys-



David Werner

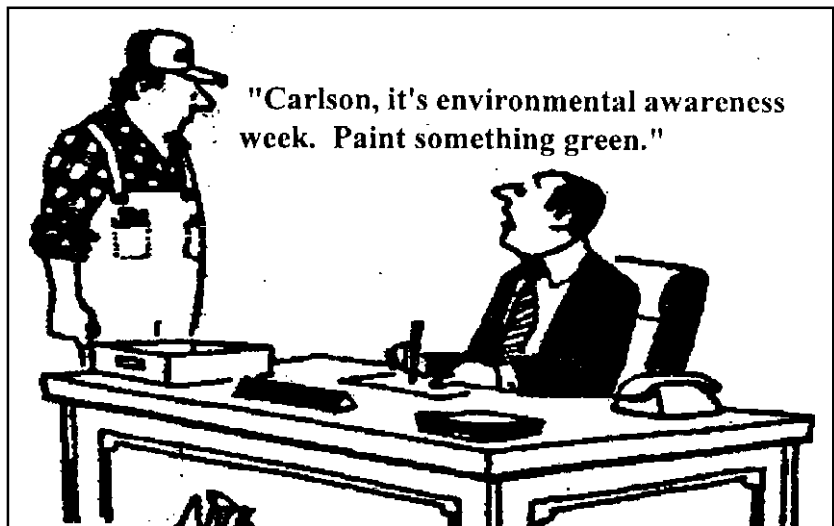
“ (This is also discussed in the PHA analytical background paper “The Political Economy of the Assault on Health”)

tems—there is a need to find the optimal scale of the economy and then develop sustainable economies. Such economies would not be static or stagnant: 'An economy in sustainable development adapts and improves in knowledge, organisation, technical efficiency, and wisdom; and it does this without assimilating or accreting, beyond some point, an ever greater percentage of the matter-energy of the ecosystem itself....'² Yet, in the short and medium term, environmentalists agree on the need for economic growth in the South. Few people would dispute the need for economic growth and industrial development in the economically poorer countries. However, unless these processes are based on environmental regeneration rather than continued environmental degradation, they will not be sustainable and will undermine the South's populations' conditions of survival. The eradication of both poverty and excessive affluence needs to be put firmly on the long-term agenda of humanity.

From a policy point of view, such economic thinking are totally absent from current decision-making. The power of growth-centred economic thinking is pervasive, and it is not difficult to understand why. Reliance on growth means many unpleasant decisions can be avoided. Dividing a growing pie is easier than redistributing what there already is. And the notion of growth is deeply ingrained in concepts such as progress and development. Yet, to come to grips with the environment and health crisis one needs the courage to question established truths, which may in the end turn out to be 'lies'. The excessive focus on economic growth is likely to be just that.

Neoliberalism and trade—as if the market could solve everything

Since the early 1980s, neoliberalism has become the dominant economic policy of our time. In countries of the North and the South, governments are aggressively pursuing the neoliberal prescription of letting the market solve all problems while reducing the role of the state to a minimum. The same ideology is firmly rooted in the world's most powerful intergovernmental economic institutions: the World Bank, the International Monetary Fund (IMF) and the World Trade Organization (WTO). As a result, privatisation and the promotion of free trade have been aggressively pursued on both regional and global scales. In the early 1990s the North American Free Trade Agreement (NAFTA) was signed, despite massive protests, and in 1995



new renaissance, spring 1996

the WTO eventually came into existence—with more powerful mandates than any other international organisation. These institutions are making efforts to open every country's market to the rest of the world. In 1998, a Multilateral Agreement on Investments (MAI) was on the verge of being instituted, which would in essence have granted foreign companies the right to 'sue' a government for denying them the right to outcompete local firms. Altogether, these policies have had direct negative consequences on people's health, which is further discussed in several other PHA analytical background papers ('for example, 'The Political Economy of the Assault on Health' and 'Health and the Health sector').

Neoliberal policies have also had serious negative consequences for the environment. Poverty, leading to overuse of marginal lands, malnutrition and ill health; the selling of land and natural resources; privatising of the common resources; reluctance to regulate large corporations; pursuit of free trade in opening up new markets; the emergence of free-trade zones with weakening worker safety and lax environmental regulations: all these stem (at least in part) from neoliberal policies and impact negatively on the environment and on people's health.

Case study or story

Do you have an example that illustrates any of the points made above? For example, do you have stories to tell about the environmental effects on health in the 'Special Economic Zones'?



Globalisation: Corporate concentration and lack of participation

The growth-oriented, neoliberal economic system is concentrating power in the hands of a minority and weakening participation in decision-making by the majority. Over the last few decades, inequalities have increased tremendously, with the richest 20% income group now having 74 times the income of the poorest 20%.³ Transnational corporations (TNCs) are taking advantage of the liberalised global economy by establishing themselves in new markets and consolidating their positions through giant mergers, which are now happening at a frantic pace. The value of mergers between TNCs exploded from USD 0.9 trillion in 1996 to USD 3.4 trillion in 1999.⁴ In 1974, the annual value of US acquisitions was less than USD 12 billion, which rose to USD 330 billion in 1988, and in 1999 exceeded USD 1.7 trillion.⁵

In short, the already powerful are becoming more powerful. Through their activities on a global scale, countries are forced to compete with each other by offering the most favourable business conditions—often in the form of weak environmental standards and policies that keep wages low and hamper workers' ability to organise. Thus, as governments are gradually handing over much of their power to the market, it is becoming increasingly difficult to regulate against environmentally destructive behaviour, both at the national and international level. National policies that discriminate against environmentally harmful products or production processes may be challenged as constituting trade barriers.

In the name of 'free markets' and 'efficiency', economic orthodoxy is rapidly opening up the global economy for those with the best ability to take advantage of new

opportunities—those already in powerful positions—thereby perpetuating unjust and environmentally inappropriate practices. International organisations such as the WTO, the World Bank and the IMF are all consolidating power. Ideals and societal norms emphasising policies and conduct for the common good have suddenly been dismissed as naïve and unrealistic dreams and are quickly being placed on the ideological waste dump. People are feeling more and more alienated and increasingly mistrust their political systems. These disturbing transformations are further analysed in other PHA background papers on the political economy of health, and social action for health.

Case study or story

Are you familiar with any story that illustrates how globalisation and corporate concentration affect the environment and the health situation in your community or country? Please submit these to the PHA process!

Scale

Environmental destruction is not new. However, never before has it taken place on such a large scale, at such a rate and with such disastrous consequences as today. Why is this? Coupled with the underlying economic factors discussed earlier, the sheer size of human society may play an important role. Today, almost all societies are interconnected, and it has become increasingly easy to get away with activities in one place that cause harm at some other, distant place.

In today's globalised society, the consequences of most of our actions are hidden. We cannot directly see—or choose not to see—the Costa Rican farmer who is suffering from cancer after having sprayed the bananas we eat with pesticides. We are not exposed to the radioactive rivers and the deformed children born in communities where uranium is mined for the nuclear-powered electricity we use in our homes. In fact, the norms and ethics of conducting business and economics are based on the acceptance that costs and suffering passed onto others are fine as long as they are not visible. In a world economy driven by stock markets and international trade, the distance between those who benefit and those who suffer from the costs is steadily increasing. This is the true face of globalisation.

Poverty, over-consumption, the environment and population

The relation between consumption, poverty, environmental destruction and population has long been one of the most controversial issues in the environmental debate. Some environmentalists argue that the growing population of the world (especially in the South) is a root cause to the global environmental destruction and one of the most serious threats. They say that the world is rapidly reaching the maximum number of people that it can feed. Every additional person will mean increased environmental destruction and overuse of natural resources. They see the Third World population growth as a ticking bomb, and argue that it must be curbed by drastic means.

Although it is true that there is a limit to how many people the earth can sustain, the above reasoning has some fundamental flaws.

First, looking at the number of people without also taking into account each person's consumption gives the wrong message. In fact, overconsumption and affluence in the rich world and among the world's elites is a more serious problem than the number of children that poor people have. Currently the richer fifth of the world consumes four fifths of the world's resources and is responsible for the majority of the pollution and waste. On average, a child born in the United States will be a 50-100 times larger burden to the Earth's ecosystems than a child born in the Third World. Therefore, population should be as much of a Northern concern as a Southern concern. With their current lifestyles, most of the Northern countries are already 'over-populated'.

Second, concentrating on numbers is to focus too much on symptoms of much larger, underlying problems. Those worried about the rapidly growing human population have too often seen 'technical' approaches such as family planning and coercive population control measures as solutions. Yet, it is clear that the most important factors behind the reduction of population growth are the improvement of social conditions, women's status,

education and reproductive rights, and overall equity in society. Availability of contraceptives is just a necessary condition, but far from the solution. Even if one focuses on numbers, the best way to reduce population growth is to fight for social justice.

The Way Forward

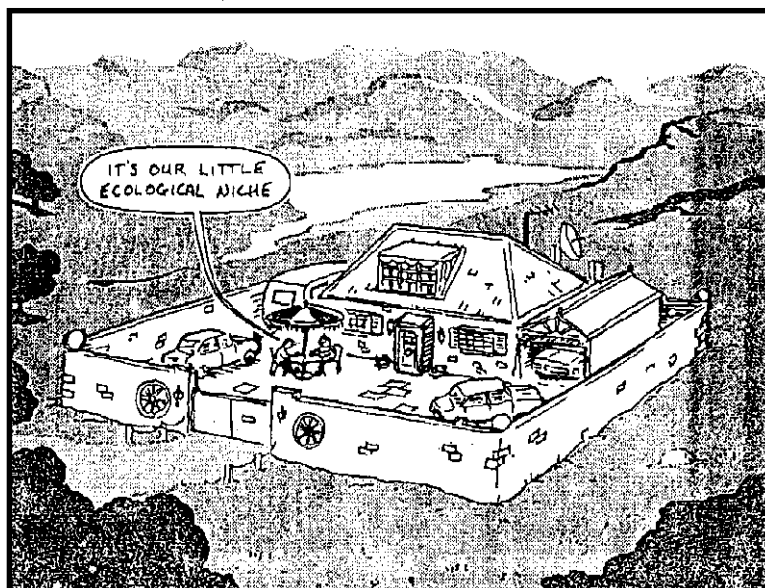
In order to successfully move towards lasting solutions to the health and environment crisis, we need to be aware of future challenges, the conceptual barriers that need to be overcome and various forms of social action for change.

Future challenges

New technologies: possibilities and threats

Consideration of the environmental problems we have experienced to date shows clearly that many of them stem from the introduction of new technologies. These were initially thought to be harmless and then, at a later stage, when their use had become widespread, they were found to be destructive. DDT was initially seen as a miracle chemical; the emission of CO₂ from cars was not regarded as a problem at first; and no one thought that cadmium used in batteries would eventually show up in the blood of all living beings.

What, then, are the emerging and potential environmental and health hazards from which we may suffer in the future? What new technologies are under development? What trends need to be scrutinised now in order to anticipate and preempt future problems? These are important questions for PHA activists to consider.



unesco source no 69, may 1995

In the field of genetics and biotechnology, development of new methods and technologies is taking place so rapidly that there is very little chance to scrutinise it all carefully. Despite the many promises claimed by its proponents, there are a number of biotechnology applications that

may have direct negative effects on people's health. Some molecular biologists point out, for example, that very little is known about 'gene ecology', the spontaneous interaction between genes within a manipulated organism or what the effect on humans may be of eating genetically manipulated food.⁶ As long as there is so much uncertainty surrounding the technology there should be very tight restrictions on its application outside the laboratory. Likewise, much controversy surrounds the introduction of genetically modified plants in farmers' fields. Critics fear that the genetically modified organisms may interfere with the natural populations and at worst cause considerable ecological disruption or even epidemics. Several countries are also using genetic engineering to develop new forms of weapons that could have disastrous consequences for both people and nature. For example, in at least a dozen countries there is research on the use of biological weapons targeted for certain ethnic groups of a population.⁷

However, it is important for health activists to also look beyond biotechnology. Today, several new technologies with potentially huge implications on health and the environment are under development. Nano-technology and its merging with micro-electronics and genetic engineering, the development of micro-robots and the field of 'psycho-engineering' all present serious concerns from both a health and environment point of view. Discussions on both the threats and possibilities of these technologies must urgently be brought into the public debate.

The introduction of new technologies in unjust societies always benefits those in power and shifts the harmful effects onto those with little influence or power. One of the foremost challenges for the future is thus to handle better the development and introduction of new inventions. Mechanisms are needed to stimulate the development of relevant, environmentally and socially appropriate technologies. Procedures and regulations must be put in place within universities as well as in the private sector to prevent the development of destructive technologies.

Implementing the precautionary principle

One useful principle to guide the way forward is the 'precautionary principle'. This principle calls for prudence and restraint in cases of uncertainty, to ensure that even the suspicion of a technology or policy having potentially negative consequences leads to caution, and shifts the burden of proof to those in

favour of the technology. A strict application of this principle would be likely to mean slower decision-making in society.

Environmental Impact Assessments (EIAs) constitute one precautionary method that has been widely used by both public and private actors around the world. In many countries, an EIA must be conducted before any major project can be considered. Health activists can build on these experiences and develop methods for prior assessment that would also include social justice and health concerns.

Overcoming short-sightedness and developing distance vision

Environmental changes are often slow when measured against the course of an individual human lifetime. These changes, therefore, do not evoke strong, immediate reactions, although they may be as much a survival issue as any other immediate dangers that we encounter and instinctively try to escape from. Biological evolution has programmed us, like all other species, to react most strongly to current, immediate problems rather than to possible future threats.

Local environmental destruction, therefore, is often much easier to detect and connect with one's own health and well-being than are distant global problems. People working at or living close to waste-dumps, polluting factories, highways and pesticide-sprayed fields are often acutely aware of how their health is affected and understand the causes and effects. It is also in these situations that people react most forcefully. The struggle for a cleaner environment and improved health become an immediate struggle for survival, with the power to mobilise people to take action, demonstrate, engage in civil disobedience and form grassroots activist organisations.

The challenge now is to strengthen these local struggles while also evoking a similar strong sense of urgency and seriousness when it comes to long-term, global environmental change. Here, it is





Introducing alternative indicators of progress

Most societies are today preoccupied with monetary indicators. Countries struggle to obtain growth in Gross Domestic Product (GDP), but often ignore whether it was achieved through heavy environmental or social costs. People measure success and personal status according to salary levels. And decisions are based on Cost-Benefit Analyses where all pros and cons are translated into money value to estimate whether a certain project is favorable or not. Environmentalists are increasingly rebelling against this way of looking at the world. Instead, alternative indicators of progress must be developed and introduced in policy-making. Several interesting concepts are currently being discussed and tested.

Community indicators

of environmental and social progress are being developed at several locations around the world. Through broad-based participation, a community can agree on certain non-monetary goals (e.g. being able to eat the fish in the local river; decreasing poverty by X%; achieving improved child survival by Y% etc.) that are then continuously monitored and given as much importance as ordinary economic reports.

In many countries, goods and products are now **labeled** if they meet certain environmental criteria. Consumers are thus presented a clear choice and can prioritise (if they can afford it) food that has been grown without pesticides, energy-efficient machines and products without toxic chemicals. In most cases, these environmental labeling systems were initiated by civil society organisations or voluntary associations of producers, without the involvement of government. In some countries, the labeling has recently been expanded to also take into account the working conditions of those producing the goods. Such 'social justice' labeling could be expanded to also explicitly include health concerns.

The concept of **equitable environmental space** has been developed as a method for estimating a morally acceptable level of consumption and pollution. A maximally acceptable level of resource use and pollution is estimated for the whole earth, and these figures are then divided by the number of people on the planet (with some adaptations for specific local/regional factors). The result is a set of indicators that shows that most Northern countries need drastically to reduce consumption,

much more difficult to see the direct causes and effects, and it may be more difficult to identify who benefits in the short run and who pays the price in the long run. Often, present beneficiaries may also suffer in the long term. In short, it requires a *qualitatively* different type of understanding to see why and how long-term ecosystem disruption will endanger health and our very survival. Although the international panel of climate researchers have unanimously concluded that global emissions of greenhouse gases must be curbed to a fraction of current levels within a few decades in order to avoid a catastrophic climate change, the world's governments are still negotiating on the margin, agreeing on a few per cent reductions for the coming decades. The powers-that-be seem to believe that the life-supporting capacity of the natural systems is open to negotiation: that it will somehow be possible to get away with abusing the Earth—or perhaps that it is simply not worth giving up some of the short-term individual benefits for the sake of the long-term survival of future generations and the planet itself. This tendency is both shortsighted and cynical, and must be countered by networks of people who take responsibility also for the future.

As governments and business have not yet shown that they can abandon short-term agendas, most of the hope falls on people's movements and civil society organisations (CSOs) being able to take the lead.

while there is room for the poorest countries to grow and increase their consumption levels significantly. The average industrialised country needs to reduce its natural resource use and pollution levels to a tenth of current levels. This **'Factor ten'** reduction can be achieved without negatively affecting the quality of life. Through careful planning, altered lifestyles and improved efficiency, most of the required reduction can easily be achieved.

Private corporations are also introducing alternative indicators. Several **environmental management systems** now exist internationally. These require companies to set environmental goals and systems for monitoring, training and follow-up activities. Many corporations are also producing annual environmental reports as a complement to their annual financial reports. Yet, human rights, health and social justice concerns are seldom taken into account. Health activists could lobby for the expansion of these practices to incorporate these additional concerns.

Reshaping the economy and development as if people and the planet mattered—the need for a new vision

The environment and health crisis cries out for new, alternative visions of development. People everywhere share 'gut feelings' that some things are fundamentally wrong; that the wrong priorities are being set and that their well-being is slowly being undermined. The articulation of visions that put both ordinary people and the environment at the centre are needed and will provide meaning and help to mobilise actions for change.

The formulation of such alternative development visions is taking place among people's organisations and movements in all continents. Despite their diversity, many common threads stand out: the need to increase public participation and counter corporate concentration of power; the need to re-create healthy communities; the necessity to reshape the global economic system so that it is based on a recognition of environmental constraints and equity; the call for a closer and more spiritual relationship with nature; and the attraction of collective solutions and responsibilities while maintaining considerable individual freedom. Some of the alternative visions are the result of new ideas, while there is also a huge wealth of experiences and models to learn from traditional societies.

There is a growing sense of unity and empowerment among people around the world involved in health and environmental activism. Through the People's Health Assembly, the struggle towards a just and ecologically sustainable society will be

taken yet another step forward.

Movements for change

Throughout human history, structural changes in society have started with the convictions and dedicated struggles of a minority. Today, there are tremendous opportunities for widespread, coordinated action. Groups and networks that are eagerly hoping to link up with a larger, global movement can be found all over the world. Although the opposing interests are enormously powerful, it must not be forgotten that people's power, when well organised, is often more influential than anyone could dream of. It is this, in essence, that the People's Health Assembly is all about.

In the PHA analytical background paper "Communication as if people mattered" the strategies used by the world's ruling classes to keep the majority of humanity disempowered and complacent, and the methods and resources whereby enough people can become sufficiently aware and empowered collectively to transform our current unfair social order, are thoroughly examined. These discussions are not repeated here in any detail; instead some points with particular environmental relevance are mentioned.

Learning from the environmental movement

What can PHA affiliated organisations and networks learn from the environmental movement? Maybe a great deal. Over the last few decades environmentally oriented networks and CSOs have grown considerably in both number and influence. Their organising and political skills are becoming ever more sophisticated and they are rapidly learning how to organise effective global networks. In recent years, for example, many environmental CSOs have begun to use the



internet in sophisticated ways—both as an effective campaigning tool and as a way to coordinate work, share information, and form and maintain networks.

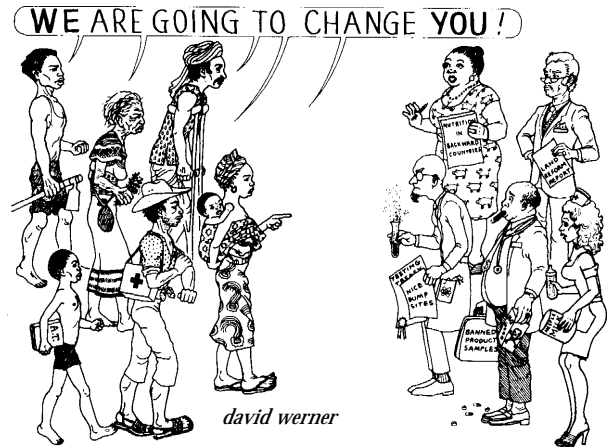
In certain fora, environmental CSOs have been particularly influential as lobbyists at the international level. In the area of genetic resources and biodiversity, as just one example, CSOs such as the Rural Advancement Foundation International (RAFI) have succeeded in significantly influencing the international negotiations on the Convention on Biological Diversity and in UN Food and Agriculture Organisation (FAO) fora. Maybe there is scope for the progressive health movement to develop its capacity and resources to participate more forcefully in the various fora of international policy-making. This is one practical aim of the People's Health Assembly.

Another strength of the environmental movement is its huge diversity. Within the movement there is room for service-providing, 'watchdog' activities, campaigning and think-tank/research-oriented CSOs. The more effectively these organisations are able to draw on each other's strengths and experiences, the more influential they will become.

The environmental justice movement

Traditionally, those who are most prosperous have also been those who are most effective in preventing hazardous and other dangerous operations from taking place in their neighbourhoods. Through this 'not-in-my-backyard' mentality they have passed the problem on to disempowered and marginalised communities. However, increasingly around the world, people who have ended up with the most hazardous and polluting industries in their backyards are protesting and mobilising. Thousands of grassroots movements claiming 'environmental justice' have emerged around the world. They forcefully cry out against the unacceptable fact that their children, family members and friends get sick and even die from environmental hazards. Interestingly, women often tend to take leadership in these struggles, perhaps reflecting that the very survival of their families is at stake.

In many areas, those grassroots environmental movements that are also oriented towards social justice are also beginning to form alliances and networks, thereby bringing the struggle to the next level and conscientising their members on the underlying, root causes of their problems. In South Africa, for example, the Environmental Justice Networking Forum, formed in the early 1990s, now has more than 400 member groups and organisations. Through such networks, the struggle can be directed towards the goal of 'not-in-



anyone's-backyard', thus shifting attention to the deeper, more long-term problems of our societies' power structures, lifestyles and injustices.

Environment and health—a common struggle

After all, the health and the environmental movements are both part of the common, overriding struggle for a just, healthy and sustainable society. It is surprising, however, how little interaction there seems to be between activists of the environmental movements and health activists. One explanation for this may be that many mainstream environmental organisations are concerned almost exclusively with nature conservation and have not traditionally seen issues of social justice and people's well-being as part of their agenda.

The environmental movements need therefore to place their environmental struggles much more clearly within an overall context of health and social justice for all. This would also be strategically wise as people are usually deeply concerned with their own and their families' health. It is to be hoped that environmentalists will increasingly regard the struggles for health as an integral part of their own struggles. Likewise, as this paper argues, the struggle for health must also join with the struggle against environmental destruction and social injustice.

Notes

- ¹ McMichael, A.J. 1993. *Planetary Overload: Global Environmental Change and the Health of the Human Species*. Cambridge: Cambridge University Press. (p. 85-6).
- ² Daly, Herman. "Sustainable Growth: an Impossibility Theorem". First published in *Development*, 1990.
- ³ *Human Development Report*, UNDP 1999.
- ⁴ Coorigan, Tracy. 'Cross-border M&A deals at record levels'. *Financial Times*, April 5, 1999. (p.16)
- ⁵ Mooney, Pat. 'The ETC Century'. *Development Dialogue*. Forthcoming.
- ⁶ Ho, Mae-Wan et al. 1998. 'Gene Technology and Gene Ecology of Infectious Diseases'. Commissioned by the *Third World Network*, Penang, Malaysia and *The Ecologist*, UK.
- ⁷ Mooney, Pat. 'The ETC Century'. *Development Dialogue*. Forthcoming.

Appendix 1: Actions for change

What are your suggestions, demands and visions for the future? What should governments, corporations, civil society activists, the media and ordinary people do to overcome environmental and health problems? How can your visions be transformed into reality?

Below you will find a first and very tentative list of points that relate specifically to the issues brought up in this paper around which specific actions are planned. Please discuss them with your friends and colleagues and then add to the list. Your own and everybody else's suggestions will be taken into account in the preparations for a *People's Charter for Health*.

- ⊗ Lobby for the implementation of the *precautionary principl*. This principle has been endorsed by most countries and calls for restraint in cases of uncertainty. Even the suspicion of a technology or a policy having potentially negative consequences should motivate restraint and shift the burden of proof to those in favour of it.
- ⊗ Mechanisms should be developed and implemented to choose relevant, and environmentally and socially appropriate, *technologies*, while rejecting destructive ones.
- ⊗ *Economic theory* has to be redefined to recognise social and environmental constraints.
- ⊗ 'Tax shifts' should be introduced to increase the tax on the 'bads' (energy consumption,

waste disposal etc) while decreasing the tax on labour and means that combat unemployment.

- ⊗ Accounting practices that take into account both environmental and human well-being should be developed—both for national accounting purposes, companies and public institutions. *Environmental management systems* should be implemented and expanded to include health and social justice concerns.
- ⊗ Consumer products should be labelled so that consumers can choose to buy products that are environmentally and socially responsible:
- ⊗ Overconsumption and affluent lifestyles must be curbed—both in the North and the South. Industrial countries in the North must aim on average for a tenfold reduction ('Factor Ten') of their consumption and pollution levels.

A 'People's Chamber' of the United Nations and a 'World Sustainable Development Organisation' should be established. The latter institution should have the power to challenge, for example, the World Trade Organization (WTO) when environmental and social values are being threatened by a shortsighted, trade-oriented agenda.

Appendix 2: Examples of issues to discuss

- ⊗ What are the important environmental problems that affect you locally. Are you affected, directly, or indirectly, by global environmental problems?
- ⊗ In what ways do these problems affect people's health?
- ⊗ What are the causes of these health and environmental problems?
- ⊗ What health and environmental groups could you link up with?
- ⊗ Do you have any stories from your area that illustrate what has been discussed in this paper, as well as other aspects of the environment and health crisis?
- ⊗ Can you identify 'new' or emerging threats to the environment and health in your area? What are possible future threats?
- ⊗ How can environment and health activists work more closely together?