Trade Unions and Environmentally
Sustainable Development

Booklet 1

ENVIRONMENTAL INDICATORS OF DEVELOPMENT

Workers' Education and Environment
Project INT93/M12/NOR

Bureau for Workers' Activities
International Labour Office Geneva

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It comprises:

Guide to the Booklets

1. Environmental Indicators of Development
2. Political Indicators of Development
3. Economic Development and Security
4. Social Development
5. Equality of Opportunity and Treatment
6. Education and Training
7. International Development

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Introduction

In this booklet we look at the environmental issues discussed in the booklets in the ILO "Workers' Education and Environment" series, and which may help you, as trade unionists, promote union policies on environmentally sustainable development.

Environmental issues are many and varied. This booklet looks at the links between the working and living environment, protection of national resources, deforestation, desertification, biodiversity, energy use and pollution, urbanization, managing wastes, transport and pollution. All will have an effect on the working and living environment of workers and their families.

It traces the history of the increasing awareness over recent years of the need to effectively manage the environment if development is to be at all sustainable, showing that the environment and development are not separate challenges but are very closely linked.

After describing some of the main issues from local, national and international perspectives, the booklet looks at the important role that workers and trade unions can play in improving environmental protection and sustainable development. This means looking primarily at the impact of industrial and other activities on the environment and vice-versa, and making the environment a workplace issue.

In this respect, unions are increasingly linking environmental issues to another long-standing union concern — workplace health and safety. They are looking at the rights they have won and the skills they have developed in relation to this, and thinking about extending them to work on the environment.

In this way they are using environmental audits to identify environmental problems related to work, and negotiating "green" agreements with employers at workplace and national levels, as well as using their expertise in tripartite advisory and decision-making bodies.

Hopefully, this booklet will help you and your union to:

- think about the major environmental issues and their relationship to development in your country and at international level;
- think about the important role unions can play at the workplace in relation to identifying environmental problems and finding solutions to them in cooperation with employers and community;
- consider the importance of participation in advisory bodies and environmental negotiations at all levels;
- define priorities to include in a union policy on overall environmentally sustainable development.

ENVIRONMENTAL INDICATORS OF DEVELOPMENT

Environment and development are not separate challenges. They are closely linked. Development cannot continue if the environment and natural resources deteriorate, and the environment cannot be protected if economic growth ignores the costs of environmental destruction.

The environment as an issue in development came up for debate in the early 1970s when the UN Conference on the Human Environment was called in Stockholm in 1972 to discuss the rights of humans to a healthy and productive environment. This conference raised hopes for greater international cooperation on major issues, especially on access for all to basic services such as adequate food, safe water, good housing, education, etc.

Environmental degradation, which was first seen as a problem of wealthier nations and a result of industrialization, was increasingly seen in a wider context and that it was a survival issue for developing nations. It was seen as part of the downward spiral of linked environmental and economic decline in which many of the poorest nations were, and still are, trapped.

The 1980s, however, were marked by a retreat from these social concerns. It took the creation of the UN World Commission on Environment and Development in 1983 and the publication of its landmark report, "Our Common Future", in 1987, to more acutely focus the world's attentions on the links between environmental problems, patterns of economic development, and social and political factors.

The report warned that people had to change many of the ways in which they did business and lived or the world would face unacceptable levels of human suffering and environmental damage. The Commission said that the global economy had to meet people's needs and legitimate desires, but growth had to fit within the planet's ecological limits. Humanity had to "ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs".

In 1989, the United Nations began planning a Conference on Environment and Development to spell out how to achieve sustainable development. For two years thousands of people from non-governmental organizations, trade unions, businesses, education, women's groups, indigenous groups and others cotnributed to the negotiating processes that led to the 1992 Earth Summit in Rio de Janeiro.

The Earth Summit produced the Rio Declaration on Environment and Development; two international agreements on climate change and on biological diversity; a statement of forest principles; and Agenda 21, an action programme for the 21st century. The latter offers concrete proposals for action to be taken globally by governments, workers' and employers' organizations, UN organizations, development agencies and other non-governmental organizations in every area in which human activity impacts on the environment.

"... humanity has reached a turning point. We can continue with present policies which are deepening economic divisions within and between countries — which increase poverty, hunger, sickness and illiteracy and cause the continuing deterioration of the ecosystem on which life and Earth depend.

Or we can change course. We can act to improve the living standards of those who are in need. We can better manage and protect the ecosystem and bring about a more prosperous future for us all. No nation can achieve this on its own. Together we can — in a global partnership for sustainable development".

Agenda 21

The Earth Summit in Rio did much to raise people's awareness of environmental problems and to move the concept of the environment from a narrow focus on pollution to a broad range of issues related to both environment and development. It also showed that environmental problems are global as well as local in nature.

This booklet looks at the direct links of development and environment from a local, national and international viewpoint. It considers such issues as the links between the working and living environment, protection of national resources, deforestation, desertification, biodiversity, energy use and pollution, urbanization, managing wastes, transport and pollution. All will have an effect on the working and living environment of workers and their families.

(The more "indirect" effects on the environment and sustainable development, such as social, political, economic and equality factors, are considered in the other booklets in this series.)

The issues covered in this booklet are discussed in greater detail in the ILO "Workers' Education and Environment" booklets, available from ACTRAV, ILO. It is strongly recommended that readers look at these for more details in addition to the brief overview that follows

Protection of national resources

Whether these are the oceans, seas and coastal areas, or forests and land, or energy resources, etc. they all form an essential part of the global life-support system, influencing food and other resources for the growing world population, as well as climate and the state of the atmosphere.

When managed in a sustainable manner, lands, forests, oceans, etc., can produce goods and services to help development. But many of these resources are presently threatened by uncontrolled degradation, pollution and conversion to other uses. Agricultural expansion, overgrazing or over-fishing, unsustainable logging, damage from pollution, greedy exploitation of minerals and energy resources. . . all help to damage ecosystems and livelihoods in the long-term.

Beth Goodson, ILO

As many as 70,000 square kilometres of farmland are abandoned each year as a result of degradation, and about 4 million hectares of rain-fed cropland are lost annually to soil erosion.

Forest

In Europe 475,000 square kilometres of forest, an area larger than Germany, have been damaged by air pollution. The resulting economic loss is about $35 billion a year, equal to Hungary's gross domestic product.

Every year, some 20 million hectares of tropical forest are cleared outright or grossly degraded.

The UN Earth Summit in Rio de Janeiro in 1992 came up with a "Statement on Forest Principles" to look at protection of the world's forests, and in particular the tropical rain forests. (It was originally aimed to having a Convention but this was abandoned under pressure from states with major forestry industries).

This statement basically says that forests, with their complex ecosystems are essential to economic development and the maintenance of all forms of life. They are the source of wood, food and medicine; they act as reservoirs for water and for carbon that would otherwise get into the atmosphere and act as a greenhouse gas; they also fulfill human cultural and spiritual needs.

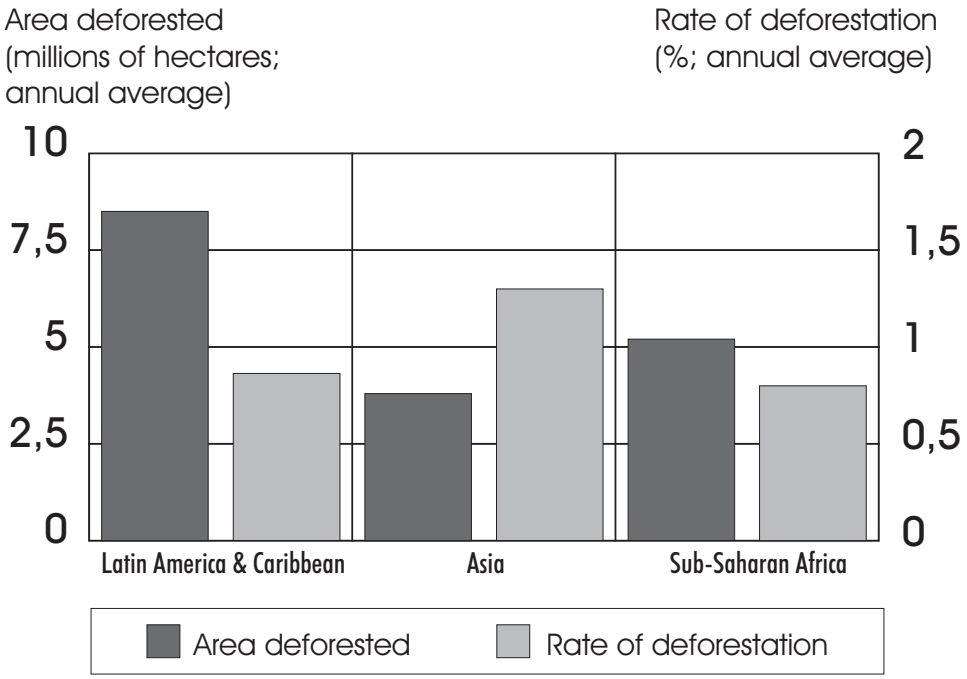
The forest principles call for, among other things:

- a "greening" of the world through forest planting and conservation;
- countries' rights to use forests for their social and economic development, but in a sustainable manner;
- profits from biotechnology products and genetic materials taken from forests to be shared, on mutually agreed terms, with countries where the forests are located;
- environmentally sustainable management of forests, plantations and the areas around forests to provide employment and reduce pressure to exploit old-growth forests;
- planning and implementation of national forest policies to involve a wide variety of people and organizations;
- trade measures to encourage local processing and higher prices for processed products. Tariffs and other barriers to markets for such goods should be reduced or removed;

Hannu Jokilouma

- controls on pollutants, such as acid rain, that harm forests.

Loss of tropical forests in developing regions 1980 - 1990



Source: World Bank 1992

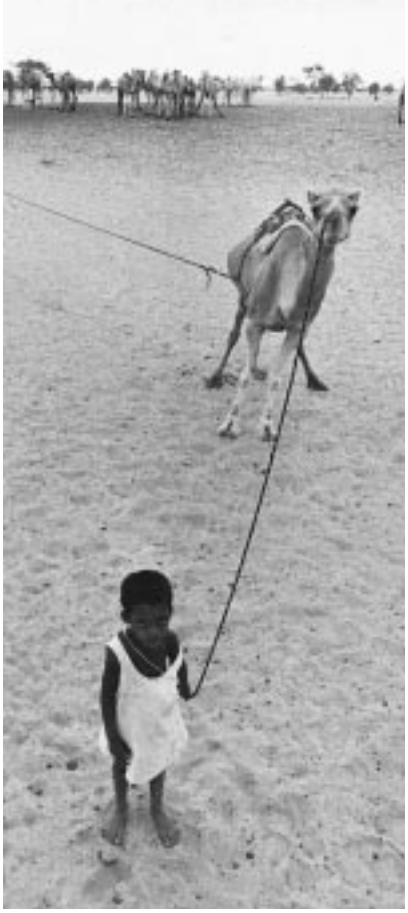
DISCUSSION POINTS

What policies and practices can your union pursue to help avoid deforestation:

- in your own country?
- in those from which you import timber products?

Desertification

Desertification is the process of land degradation that can be caused by climate variations and by human impact, although human activities can have an effect on climate on a global level and thus be a cause of climate change also. It particularly affects dry lands that are already ecologically fragile.



ILO - Laffont/Sigma

The problem is very large — 70% of all the world's drylands, or 3.6 billion hectares, are already affected by desertification. This is one-quarter of the world's land. The impacts include degradation of grazing land and a decline in food production, which in turn leads to poverty and starvation.

About 200 million people are severely affected by desertification

The UN Earth Summit in Rio came up with an International Convention to Combat Desertification. A major feature of this Convention is its emphasis on the role of people and non-governmental organizations in local participation in decision-making, information and awareness raising on issues relating to land management. The Convention is an agreement signed by 107 countries at present, and only 10 countries have ratified it, that is promise to incorporate its provisions into national law. It will become a legally binding document when 50 countries have ratified it.

Biodiversity

Biodiversity, or biological diversity, is the wealth of life on Earth — the millions of plants, animals, microorganisms and their genes and habitats. Species are becoming extinct at a rapid rate and habitats threatened through overexploitation and clearing of whole areas of forest, wetlands and land, use of toxic pesticides, pollution, hunting, etc.

About 150 species are being exterminated every day and at least 25% of the world's species may become extinct or greatly reduced and confined to small areas by the middle of the 21st century, according to the Worldwide Fund for Nature. But if there are, as estimated, about 10 million species does it really matter if some species are extinguished? Does it matter if some microorganism vanishes from the face of the Earth through human interference?

Apart from the fundamental worth of all species on Earth and their right to continued existence, their beauty value and interest (to naturalists and tourist receipts among others), natural ecosystems provide humanity with many direct economic values, including all of its food and many of its medicines and industrial products. A large portion of the protein in our diets comes straight from nature in the form of fish and animals. Timber, wood products, rubber, spices, herbs, wild fruit, many kinds of oils and organic chemicals, and the active ingredients in at least one-third of prescription drugs come from wild plants, fungi and microorganisms. Many of humanity's crops were originally developed through selective breeding of wild grasses.

The socio-economic benefits of biodiversity

- About 4.5% of GDP in the United States (some $87 billion per year) is attributable to the harvest of wild species.
- In Asia, by the mid 1970s, genetic improvements had increased wheat production by $2 billion and rice production by $1.5 billion per year by incorporating dwarfism into both crops.
- A "useless" wild wheat plant from Turkey was used to give disease resistance to commercial wheat varieties worth $50 million annually to the United States alone.
- One gene from a single Ethiopian barley plant now protects California's $160 million annual barley crop from yellow dwarf virus.
- An ancient wild relative of corn from Mexico can be crossed with modern corn varieties with potential savings to farmers estimated at $4.4 billion annually worldwide.
- In 1960, a child suffering from leukemia had only one chance in five of survival. Now the child has four chances in five, due to treatment with drugs containing active substances discovered in the rosy periwinkle, a tropical forest plant originating in Madagascar.

Source: *M.K. Tolba: Saving Our Planet — Challenges and Hopes. United Nations Environment Programme*

But perhaps the biggest value of biodiversity lies in the ecological services provided by the interaction between organisms and the environment, and which are essential to the maintenance of human life but which are rarely recognised. These include the maintenance of the gaseous quality of the atmosphere; climate regulation; recycling of nutrients, generation and maintenance of soils; control of the water cycle; pollination; and natural pest control. If biodiversity is lost through human activities then it can be expected that these essential services will also be thrown into disarray and the quality of life affected.

The Convention on Biological Diversity that came out of the Rio Earth Summit in 1992 gives countries rights over their biological resources, but also makes them responsible for conserving their biological diversity and for using their biological resources in a sustainable manner. It also looks at access to genetic materials and the sharing of benefits from commercial and other uses of genetic resources. It states that developing countries are to have access to environmentally sound technologies that they need for the conservation and sustainable use of biodiversity. This access will be under fair and most favourable terms and will recognize patent rights.

DISCUSSION POINTS

Look at the above statistics and think about the following questions:

- Where does it seem most of the world's exploitable resources from living species comes from?
- Which countries can make most commercial use of these resources?
- Can any aspect of the biodiversity of your country be exploited commercially but sustainably and in a more equitable manner?
- What measures are needed to protect biodiversity and ensure that your country benefits from its rightful resources?

Give examples with your answers.

Energy

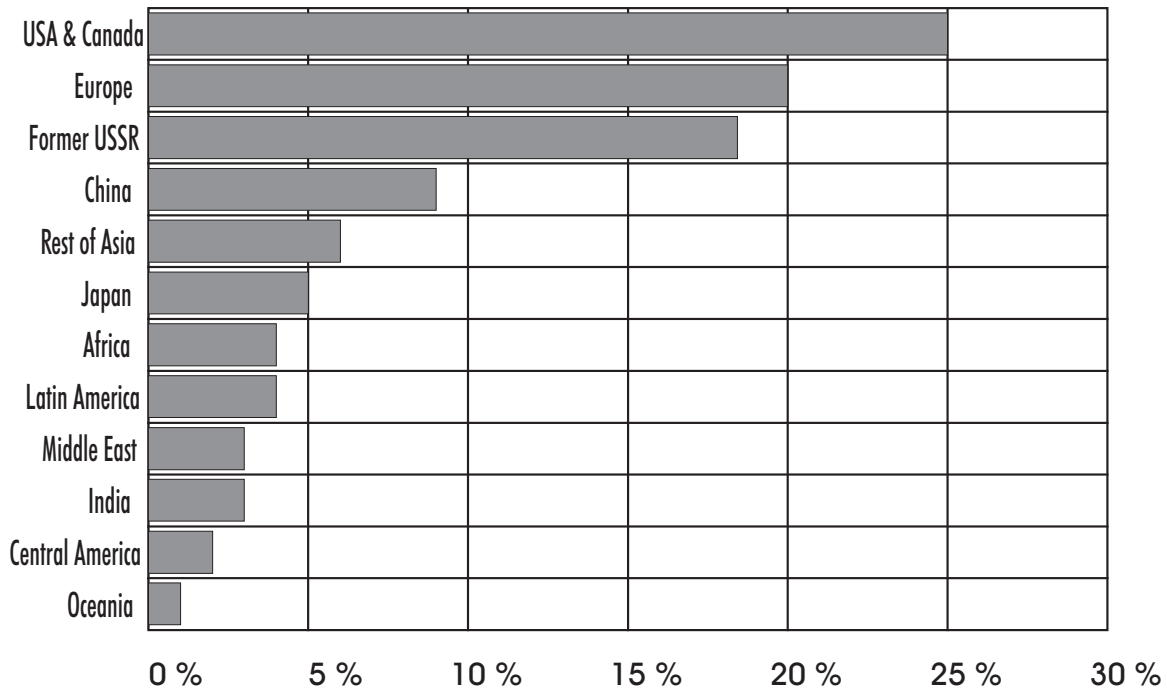
A major cause of deterioration of the environment is the unsustainable pattern of energy production and consumption. Industrialization and urbanization have led to a rise in world energy exploitation — and an extremely uneven distribution on a world scale.

The most rapid growth of energy consumption is in developing countries as they try to meet the needs of their growing populations. But energy consumption per head in industrialized countries is about nine times that per head in developing countries:

People in industrialized countries constitute a little more than one-fifth of the world's population but consume nearly nine times more commercial energy per head than people in developing countries.

- Between 1965 and 1991 energy use per $100 of GDP was cut dramatically from 168kg. of oil equivalent to 25kg., through aggressive conservation measures and more appropriate pricing policies.
- Developing countries' contribution to global emissions is less than a quarter of that of industrialized countries, even though their population is 3.5 times larger.

Shares of world energy consumption by region, 1990



Source: UN, 1990 Energy Statistics Yearbook, 1992

Future energy development will depend on its long-term availability and the need to find a solution to the present pattern of pollution by sulphur dioxide and carbon dioxide from burning fossil fuels. This calls for a reassessment of energy policy towards renewable sources of energy and a more efficient and productive use of energy.

The primary sources of energy today are non-renewable. Coal, the most readily available, is often also the most polluting. Renewable energy systems such as solar, wind and geothermal power are increasing but are still in a primitive state of development. Hydropower and wood as a specially grown fuel already have their place in world energy supplies but their remaining potential for expansion is huge. It has been estimated that renewable energy resources could account for three-fifths of the world's electricity market, and two-fifths of the market for fuels used directly, by the middle of the 21st century.

The special role that nuclear power could play in reducing pollution from carbon and sulphur emissions is offset by its potential for serious accidents and the problems of disposing of nuclear waste.

The scope and need for energy saving measures is potentially much higher in industrialised countries.

Urbanization

By the year 2000, half the world's population will be living in cities. The urbanization of society is part of the development process and cities generate about 60% of GNP. Rapid growth of cities can strain the capacity of municipal authorities to cope with land use, city planning, public services, water supplies, waste disposal systems, transport, housing, etc., which may lead to widespread ill-health. Urbanization also has an effect on the environment through physical expansion of cities into good farming land, or often onto ecologically fragile land. Increased urban wastes and the need for fuel also put pressure on surrounding land.

WHO/T. Urban

WHEN IS A CITY HEALTHY?

A HEALTHY CITY:

- has a clean, safe physical environment;
- meets the basic needs of all its inhabitants;
- has a strong, mutually supportive, integrated, non-exploitative community;
- involves the community in local government;
- offers its inhabitants access to a wide variety of experiences, interaction and communication;
- promotes and celebrates its historical and cultural heritage;
- provides easily accessible health services;
- has a diverse, innovative economy;
- rests on a sustainable ecosystem.

WHO: Healthy Cities for Better Life

DISCUSSION POINTS

- Is migration to cities a problem in your country?
- Would improvements in rural living and work opportunities encourage poor people to stay locally? What improvements would be necessary for this?
- What do you see as necessary to reduce uban poverty and improve living standards in cities?
- What is the role of trade unions in these improvements?

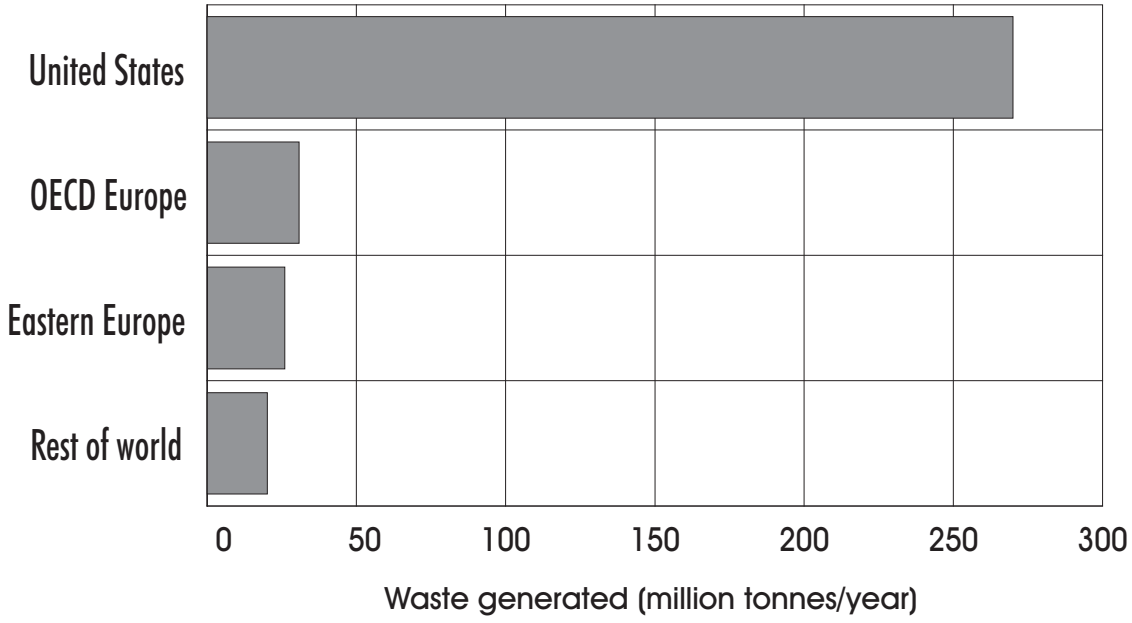
Managing Wastes

Managing wastes through reduction and recycling, of both hazardous industrial waste and sewage and garbage from cities, is also essential for environmental improvement.

An increasing amount of hazardous waste is affecting human health and the environment

Each year, as many as 5.2 million people, including 4 million children, die from diseases caused by improper disposal of sewage and solid waste. In developing countries, less than 10% of urban wastes are treated, and only a small proportion of that meets acceptable standards. In industrialized nations, the amount of waste could increase four- to five-fold by the year 2025.

Hazardous waste generation (late 1980s)



Source: M.K. Tolba: Saving Our Planet - Challenges and Hopes United Nations Environment Programme

Cleaner production

Much can be done to reduce or eliminate hazardous waste and other emissions from industrial and other activities, through the concept of "cleaner production". This means applying an integrated environmental strategy to processes and products to reduce risks to humans and the environment.

Cleaner production thus includes conserving raw materials and energy, eliminating toxic raw materials, and reducing the quantity and toxicity of all emissions and wastes — before they leave a process. This will necessarily involve a shift from cleaning up or disposing of wastes and emissions at the "end-of-the-pipe" to a more environmentally-friendly integrated approach. For products, the strategy focuses on reducing impacts along the entire life cycle of the product, from raw material extraction to the final disposal of the product.

Thus, cleaner production covers both processes and products and the impacts of both. It covers all wastes — hazardous or not — whether emitted into the air, water or land. The pathways to cleaner production require applying know-how, improving technology and managerial skills, and changing attitudes and investment policy.

Waste disposal: a less viable alternative

The costs of waste disposal are expected to double or triple by the turn of the century as disposal sites fill up and stricter controls are imposed. This has led to a trade in toxic wastes, with industrialized countries paying developing countries to take their hazardous waste, even though many developing countries do not have the facilities to treat or store it safely.

This practice led to the adoption of the Basel Convention on the Transboundary Movement of Hazardous Waste. About 65 countries have ratified this Convention which now bans the shipment of hazardous waste ÿ20from OECD to non-OECD countries. (OECD is the Organization for Economic Cooperation and Development, a grouping of the richer nations of the world). Shipments of waste for recycling are to be phased out and banned altogether by the end of 1997.

Several regional agreements also seek to restrict shipments of waste. For instance, the Fourth Lom, Convention, which governs relations between the European Union and associated states in Africa, the Caribbean and the Pacific, bans the export of hazardous waste from the EU to those developing countries. Likewise, the Bamako

Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa was adopted in 1991. Like the Basel Convention, the Bamako Convention addresses the generators of hazardous waste.

Waste management would be most effective therefore if it is ensured that those who generate the wastes pay the full cost of environmentally-safe disposal. This will make waste reduction and recycling for resource recovery more attractive.

Producing less waste is better than disposing more

WHO/E. Mandelmann

DISCUSSION POINTS

Environmentally -sustainable work- and life-styles.

There is a great deal that can be done to reduce waste at all levels.

- What is your government's policy on waste? Has it signed the Basel Convention on the Transboundary Movement of Hazardous Waste?
- What is your local authority's policy on recycling waste? Is waste sorted and collected?
- If there were a local reduction in waste, what effect would this have on some of the poorest members of society who may depend on scavenging and recuperating waste for a living?
- Does the company where you work have any purchasing and/or recycling policies in the interests of environmental protection?
- Has it investigated cleaner production techniques and technologies? Was this done in cooperation with your union?
- List the renewable and non-renewable resources in and around the place where you work. Are they used well or not?
- Does your union have any purchasing and/or recycling policies in the interests of environmental protection?
- What can you, as an individual, do to reduce waste in your home?

Give examples with all your answers

Transport

Motor vehicles are a major source of pollution, not only from exhaust emissions, but also through noise and the effects of roads on the environment. The uncontrolled growth of traffic contributes to massive urban congestion; it is one of the main sources of global climate change through emissions of "greenhouse gases"; and is an important cause of the increased demand for unrenewable fossil fuels. The real costs of motor vehicles should also include the cost of accidents, which are a drain on limited health care budgets in most countries.

It is therefore necessary to change the way transportation issues are approached. Legislation to reduce exhaust emissions, increased use of public transport, road pricing, siting of housing and community services and workplaces to reduce commuting, are some of the possible solutions to the problem.

Pollution of air, soil and water

Millions of tonnes of pollutants are released into the air, soil and water each year from industrial sites, agriculture, municipal sewage systems, power stations, transport, etc. without significant restrictions from governments.

Air quality, for instance, is declining to such an extent that the health and well-being of large populations are at risk in many countries. The World Health Organization estimates that 600 million people live in urban areas where sulphur dioxide pollution of the air exceeds its recommended limits.

What is true of air quality also applies to water and soil. *"World Environment Issues"*, booklet 4 in the ILO *"Workers' Education and Environment"* series deals with these issues in more depth.

Acid rain, global warming, ozone depletion — global issues of pollution

While industrial, transportation and energy emissions can have an impact on the environment at the local level, they can also impact on a global level. The truly global effects of pollution include "acid rain"; global warming, or the "greenhouse effect"; and ozone depletion. All these issues are also described in the ILO Workers' Education and Environment booklet on *"World Environment Issues"*.

Concern about the global effects of pollution has led to a wide range of international and regional agreements, as well as national requirements aimed at limiting emissions.

An international **Convention on Long-Range Transboundary Air Pollution** came into force in 1983, followed by a **Protocol on Sulphur Emissions** in 1987. Signatories undertook to reduce their national emissions of sulphur oxides by at least 30% by 1993. A similar Protocol on Nitrous Oxide Emissions was also signed in 1988. Emissions have decreased considerably since these Conventions were adopted.

Efforts to combat ozone depletion in the upper atmosphere (which acts as a natural filter to the sun's harmful ultra-violet radiation) have led to the **Montreal Protocol on Substances that Deplete the Ozone Layer**. This Protocol calls for all industrialized countries to phase out production of the ozone-destroying chlorofluorocarbons by January 1996, whilst giving developing nations longer to end production of them. The chemicals that are listed in the Protocol and the time limits for ending production are constantly reviewed and updated.

The **United Nations Framework Convention on Climate Change** is another global convention that came out of the 1992 Earth Summit in Rio. It states that countries should protect the world's climate system for the benefit of present and future generations. Countries should enact effective environmental legislation to control greenhouse gas emissions (such as carbon dioxide) and ensure the functioning of natural processes (such as forests and oceans) that can remove some of the gases from the atmosphere. It also says that most of the world's greenhouse gases come from industrialized nations and that they should take the lead in combating climate change and its adverse effects.

The living environment: a trade union issue linked to the working environment

Many trade unions have examined how they might play a more active role in the process of improving environmental protection and sustainable development. The growing interest today in the general environment has, for us as trade unionists, partly grown out of the continuing problems that exist in the working environment.

The last decades have brought considerable growth in industrial production and trade, particularly in developing countries. Such growth has brought obvious benefits, but it has also brought risks of damage to the environment and human health, especially around factories and mines, which is also where workers and their families live.

While industry is essential for the development of any country, the pattern of industrial production in developing countries has been towards more capital-intensive activities such as chemicals, metals, machinery and equipment. These heavy industries have always been the most polluting and demanding on the local environment, in contrast to light industries, and are therefore likely to have most impact on the living environment of workers and their families living nearby.

The character of day-to-day activities in other sectors of the economy — transport pollution, chemical use in agriculture, energy use and pollution, etc. — also shows that it is increasingly difficult to isolate the working environment from the general environment.

The connection between the living and the working environment is perhaps easiest to see in the case of a major accident, such as the Bhopal disaster in India in 1984, in which over 4,000 people have died as a result of a leak of deadly methyl isocyanate gas. The Chernobyl nuclear disaster in 1986 released a plume of radioactivity over much of Eastern, Central and Western Europe, rendering the immediate countryside unlivable since, and causing extensive environmental damage in its tracks elsewhere. These, and any industrial accident with loss of local life, prove that the factory gate is not an effective barrier against workplace chemicals and other agents.

But relatively few workers and their families die in major industrial accidents compared with the number who die from "routine" accidents and pollution. The quiet and often unseen daily build-up of poisons from leaks, spills, dumping of wastes, and normal operating practices have much more impact on local rivers, farm land and air than any single disaster that may hit the headlines. Additionally, pollution knows no national boundaries.

Workers must, of course, be protected against hazards in the workplace. But even the best workplace health and safety provisions lose much of their value if workers and their families are exposed off-duty to the same pollutants by the very activities that provide their living.

Pollution in rivers and in the air from work activities can be carried into other countries through shared waterways and on the wind. Agricultural chemicals that are not easily broken down, for instance, can be carried thousands of kilometres on the wind, only to be deposited at the other side of the globe, mainly in colder climates as they "condense" out of the air. In this way, toxic pesticides such as DDT sprayed in tropical countries have been found in the fatty tissues of indigenous Inuit populations who eat contaminated fish and marine mammals in Alaska and Canada.

DISCUSSION POINTS

- What environmental problems are you experiencing in your living environment? Consider air, water, chemicals, waste dumping, housing and population problems.
- Are these problems related to what is happening in different workplaces in the community? How?
- What can be done to solve these problems?
- What is the role of the trade unions?

Environment and employment

The problem is not all one-way, however. The general environment will also have an effect on industry and jobs. If the environment degrades to such an extent that it can no longer be used for direct resources or for industrial processes, such as for cooling water, then industry will of course be very much affected. If the local living environment is polluted to the extent that workers and their families become ill with respiratory problems, for instance, then their work and productivity will suffer. Then again, laws to protect and improve the environment will necessarily mean upgrading some industries, and these may use this as an excuse to relocate to another area with less strict environmental legislation, leaving redundant workers and their families behind.

Environmental protection and job creation or maintenance are therefore often seen by workers to be incompatible. But the underlying principle is that it is not a question of environment or jobs. Unless we can secure both environmental protection and safe, socially useful, individually fulfilling and freely-chosen employment, we will fail to secure either in the long-term.

The simplistic formula "pollution equals jobs, pollution control equals job losses" disregards the positive role of trade unions in promoting manpower planning, training and retraining and social support in industrial change.

The role of trade unions in workplace environmental protection

Trade unions are, by definition, work-based organizations, and it is at the level of the workplace that they are most effective and most experienced. Furthermore, unions are increasingly seeing the environment as a workplace issue — it will not be taken seriously by members if it is not rooted in their workday concerns. It is, of course, of global concern, but if we, as trade unionists, can tackle the issues that are of concern to workers directly, we will be well on the way to addressing the larger agenda.

In addition, many workers are environmental victims at work and in the community, or are seen as the producers of environmental pollution and degradation. (Even though company policies may be at fault, the worker may be the most visible element in industrial and other work activities on the environment.)

Trade unions are thus in the front line when it comes to the impact of work on the environment. They also have the organization, experience and commitment to identify the problems and to seek practical solutions.

A healthy environment depends on a healthy workplace

> **The working environment forms an important and integral part of the general environment as a whole and ... improvements in the working environment will enhance the quality of the latter.**

ILO Resolution on environment, development, employment and the role of the ILO

In some countries this work on environmental protection has already begun and has been linked to another long-standing union concern — occupational health and safety.

Consider the following facts and figures taken from the World Health Organization's "Global Strategy on Occupational Health for All":

- About 120 million workplace accidents, resulting in more than 200,000 deaths are estimated to occur annually in the world, and 68 -157 million new cases of work-related diseases are caused by various types of occupational exposures.
- 40-50% of the world's population is at risk from physical, chemical, biological, psychosocial or ergonomic hazards.
- Globally, about 100,000 chemicals, some 50 physical factors, 200 biological agents, and 20 adverse ergonomic conditions, as well as incalculable numbers and types of psychological and social problems contribute to hazardous working conditions leading to occupational injuries, diseases and stress reactions, job dissatisfaction and lack of well-being.
- About 300-350 different agents have been identified as occupational carcinogens, including benzene, chromium, nitrosamines, asbestos, ultraviolet radiation, ionising radiation, aflatoxins. The most common occupational cancers include cancer of the lung, bladder, skin and bone.

- Most of the 3,000 or so identified allergenic factors which can cause dermatitis and respiratory diseases, including asthma, occur at work. The registered number of allergy-causing substances is growing steadily in industrialized countries.
- About 30-50% of the workers in industrialized countries complain of psychological stress and overload, which are associated with sleep disturbances and depression and increased risk of cardiovascular disease, especially hypertension.
- In the least developed countries, occupational health and safety problems occur mainly in agriculture and other types of primary production. Heavy physical work, heat stress, occupational accidents, pesticide poisonings, exposure to organic dusts are frequently agravated by non-occupational factors such as nutritional problems, chronic parasitic and infectious diseases, poor hygiene and sanitation, poverty and illiteracy.
- 90-95% of workers in developing countries, and 50-80% in industrialized countries, with a few exceptions, do not have access to adequate occupational health services.

In most cases these chemical, and physical and biological agents that are of concern in the workplace are also of environmental concern. In this respect, environmental pollution can be seen as a manifestation of an occupational health problem, and workers' health is an environmental problem with an occupational aspect. This fact alone calls for effective integration of workplace health and safety and environmental issues in trade union work.

The ultimate objective of occupational health is a healthy and safe and satisfactory work environment and a healthy, active and productive worker, free from both occupational and non-occupational diseases and capable and motivated to carry out his or her daily job by experiencing job satisfaction and developing both as a worker and as an individual.

WHO: Global strategy on occupational health for all

If we look at the activity below we will be able to see that environmental and workplace consequences can be very closely linked. Some will have obvious connections, but others may be harder to see. We will also see that some issues may be more confined to the working environment. If we take the case of "noise", for example, this may be the cause of hearing problems and stress in the workplace, but its effects on the surrounding environment may be negligeable. This may not always be true, depending on your particular workplace. Airport workers, for instance, know that the noise they experience at work also affects the surrounding community. Similarly, if we take the case of lighting, it may be good in the workplace but there may be opportunities for energy saving, thus easing the strain on natural resources. Cleaner production might require the use of better technology which in turn might affect employment. There is thus plenty of scope for original thinking and innovative action strategies and negotiation points at the workplace.

ACTIVITY: LINKING ENVIRONMENTAL IMPACTS TO OCCUPATIONAL HEALTH AND SAFETY

AIMS:

- to help you look at the links between health and safety issues and the environmental impact of your workplace;
- to help you think about workplace solutions to environmental problems.

TASK:

- **Make a list of some of the more important factors of occupational health and safety that affect you and your family at work and at home.**

To help you in this task you could use one or more of the following methods to determine what hazards in your workplace affect the environment:

- use a checklist to inspect your workplace and living environment;
- survey colleagues and local community for their opinions;
- use accident and sickness records;

You will probably need to put some kind of priority on the problems you come up with to limit your choice in the first instance.

- **For each priority issue, decide what effect, if any, it has on the general environment or vice-versa.**
- **Think about what you and your union can do to bring about improvements.** Think about immediate improvements, such as repairs, and also longer term policies arising from negotiations, campaigns, etc.

You may like to use the following table to help you organize your ideas:

Issue	Effect on workers/families	Effect on environment	Action to be taken

Logically, trade unions in many countries are pressing for the rights they have won in occupational health and safety to be extended to the environmental policies of companies and governments. This involvement in environmental matters mirrors the unions' earlier campaigns and role and competences in occupational health and safety.

Just as they have won the right to know what workplace hazards they are exposed to, and the right to decide whether to accept those risks in the workplace in some countries, so should their members, as workers and citizens, be able to demand the same rights with respect to the environment. Not only are environmental matters best promoted at the workplace, from where much pollution comes, but workers can also draw on their knowledge of work processes and products to help resolve these issues.

Joining a union can save your life — and your environment

The importance of this involvement at workplace level has been shown in by different studies in the USA and the U.K. which show that involvement of union health and safety representatives reduce workplace injury rates. According to a United States study trade unions dramatically increase enforcement of the Occupational Health and Safety Act; workplaces that are unionized are more likely to receive health and safety inspections; inspections are more thorough; and they pay higher fines for non-compliance than do non-unionized workplaces.

This is because union health and safety programmes provide members with training and detailed information which make them better equipped to identify risks requiring action — especially important in areas where government inspection services are inadequate.

The same will hold true for environmental work. The successes concerning health and safety that have been registered in many countries have been due to the importance that unions have given to health and safety and the resources they have devoted to it.

So will environmental efforts require the development of structures such as environmental committees or extending the role of workplace health and safety committees. Both these strategies have their advantages and disadvantages, and it will be up to your union to decide which would work best in your local situation. Expanding the role of the health and safety committee may be safer than

stepping into the unknown, and, as we have seen, the issues are closely linked anyway. It could be, however, that the health and safety committee is already overworked, in which case enough time and energy must be devoted to helping it.

On the other hand, as the other booklets in this series show, environmental issues go well beyond traditional health and safety issues, and many unions may see a need for special committees on the environment.

Workplace environment committee or expanding the role of the health and safety committee? The precise nature of the structure is not as important as the need for it to be a genuine joint union/management committee.

Eco-auditing: identifying problems and monitoring environmental performance

One of the skills that union representatives will need to determine the environmental hazards at the workplace and to improve the environmental performance of a company is the ability to carry out environmental, or eco-audits.

Just as a health and safety representative is trained to look for hazards at the workplace by using a checklist, so training in environmental skills will allow the representative to look at the environmental impact of a company's products and processes. An environmental audit goes further than a health and safety inspection, however. It looks not just at risks at the workplace, potential pollution sources and what is being done to reduce them, but also at a company's own "green" policies, and response to local concerns about the environment. The activity found above on linking environmental concerns to workplace issues can form the basis for thinking about an environmental audit.

What an audit should cover will depend on your own workplace but a typical audit would aim to assess every point of interaction of the company with the environment and which could lead to improvements through negotiations. This would involve at least the following points:

- product planning — design, packaging, use and re-use, life-span, disposal;
- selection and use of raw materials — are they used efficiently, are there more environmentally-friendly alternatives?

- production processes — could they be safer or healthier or more environmentally sound?
- energy efficiency — power, heat, lighting, ventilation, insulation;
- safe storage — of products, raw materials and intermediates, especially chemicals;
- transportation — the use of safe and environmentally friendly transport of raw materials, chemicals, components, workforce;
- reduction and elimination of emissions and,other nuisances — not just toxic and harmful emissions, but also smells, noise, etc;
- accident prevention and procedures in the event of an emergency;
- training requirements and information needed by workers and local community.

An example of a checklist, some of the questions that will have to be asked when assessing risks to the working and living environment, is to be found in booklet 5 "The New Bargaining Agenda" in the ILO "Workers' Education and Environment" series.

An environmental audit:

- evaluates and helps improve environmental performance;
- identifies potential efficiency gains and improves effective use of resources;
- forms the basis for workplace and company target-setting;
- promotes exchange of information internally and externally;
- increases awareness and participation of trade union members;
- helps assess training needs;
- identifies employment trends;
- improves health and safety at work;
- promotes a healthy living environment;
- promotes enforcement of laws, regulations and company policy;
- improves public confidence and community links;
- enhances management/union cooperation.

After information: action

Only after we have identified the problems can we take action to improve the situation and protect our members and their families from the environmental consequences of work.

Environmental agreements at the workplace

Above all, this will mean approaching the employer to set up a joint working group to consider environmental issues, to carry out regular joint audits and to negotiate improvements. Your union can negotiate a "green" agreement at the workplace based on the information you have collected through your work with checklists, etc. (More details on environmental agreements can be seen in booklet 5 "The New Bargaining Agenda" in the ILO Workers' Education and Environment" series). It could be a separate agreement or one that is incorporated within the current collective agreement, but it should cover at least the following basic points:

- setting up a joint structure for discussion and negotiation;
- conduct and timing of regular meetings and extraordinary meetings;
- provision of information, for example, on company investment in ÿ20environmental protection, pollution and emissions, incidents, compliance with regulations and company policy, changes to work processes, etc;
- the question of confidentiality of information (in so far as it does not compromise either the company or the union in carrying out their obligations);
- recourse to expert assistance;
- education of workers, and training of union environment representatives (preferably on paid leave);
- joint environmental audits;
- company commitment to the highest possible standards of environmental protection;
- company commitment to participation of workers in environmental policy-making;
- obligation to provide necessary information to the local community.

The San Miguel Corporation, Philippines: an example of a joint environment policy

The San Miguel Corporation (SMC) is the biggest food, beverage and packaging company in the Philippines and Southeast Asia. It prides itself as a trailblazer in environmental protection, as its policy on the environment outlined below shows. Above all, it recognizes the indispensable role of labour in realizing and sustaining the company's goals and programmes on the environment, and provides for broad participation of its employees through the collective bargaining process.

Corporate Policy on the Environment

San Miguel Corporation is committed to environmental protection and preservation as a requisite for sustainable development and for long-term socio-economic benefits to present and future generations. Thus, SMC actively contributes towards a clean and thriving environment for the well-being of its communities, employees, consumers and the nation. Total Environmental Quality is a key philosophy which reflects how SMC sources its raw materials and manufactures, packages, distributes and markets its wide range of products.

Consistent with its mission of responsible stewardship of the environment, SMC adopts a holistic approach by:

- exercising leadership in providing environment-friendly manufacturing processes, products and packaging;
- actively developing innovative and practical techniques in managing environmental issues related to its businesses and;
- supporting and implementing programmes which involve the sustainable use of resources, waste management and pollution prevention.

To reinforce the above approach, we shall:

- heighten environmental awareness among our employees and encourage them to take the lead roles in environmental quality within and outside their workplaces;
- meet or exceed environmental standards and become a role model in regulatory compliance, while continuously enhancing our environmental technology;
- foster collaboration within the San Miguel Group, with external environmental groups, the government and our host communities to maximize the effectiveness of our initiatives and;
- share our environmental policy with various stakeholders as a potential positive influence on their own environmental responsibility.

National level representation

At national level union representation is also needed in decision-making processes on environmental issues — in adopting serious environmental standards for industry and other economic activities, or for negotiating industry-level agreements.

An important first step towards this bipartite or tripartite negotiation at national level is developing a comprehensive union policy on the environment. The aim of this and the other booklets in this series is precisely to facilitate trade unions in their discussions to form a policy and action plan on their priority issues concerning environmentally sustainable development. A union policy should outline a number of specific steps that the union can take to expand its role in this area. It should help both the leadership and the members, especially environmental negotiators, to understand what the union means by environmentally sustainable development, what its immediate and long-term aims are for this, and what the strategies will be for achieving its goals.

Unions will then have to advance the interests of their members as set out in its policy in all national development plans and strategies. They will have to ensure that decision-making, whether on the environment, industrial strategies, employment policies, technology transfers or education programmes, is undertaken with a high degree of trade union input.

Such tripartite collaboration — with government and employers — is most efficient when applied to issues in which all three parties have joint interests. The issues and challenges explored in this and the other booklets lend themselves very well to tripartism. In this respect, as with collective bargaining, it is important to present a unified front during negotiations and consultations, and the role of trade unions at the national level will be strengthened by their capacity to collaborate with other partners such as other unions and non-governmental organizations.

ACTIVITY: WORLD ENVIRONMENT DAY

June 5 has been designated as World Environment Day. Each year, this day helps provide a fresh focus on the problems and solutions relating to environmental issues, through activities of different organizations at local, national and international level.

Think about how your union could participate in World Environment Day:

- What particular issues would the union like to bring to the attention of the general public?
- Look for ways to make environmental issues focus on the workplace.
- Link environmental issues to health and safety issues when it makes sense.
- Arrange a campaign in your community on one of the main issues you have identified, using, for example, an exhibition, posters, hand-outs, banners.
- Develop coalitions with other unions, environmental groups and employers in your campaign.

Participate in the next World Environment Day!!

FURTHER READING

- ILO "Workers' Education and Environment " booklets. ACTRAV, ILO
- Environment and the World of Work: Report of the Director-General, International Labour Conference, 77th Session, 1990
- ILO Resolution concerning environment, development, employment and the role of the ILO, 1990
- The Practical Role of Trade Unions in Improving Environmental Protection and Sustainable Development. Background paper to the Symposium on Workers' Education and the Environment. October 1993, ILO
- Earth Summit Agenda 21: The United Nations Programme of Action From Rio. UN, New York
- Our Common Future. The World Commission on Environment and Development, Geneva, Switzerland
- Joint Labour-Management Initiatives on Environment. Report from the Philippines for the ILO InterDepartmental Project on Environment and the World of Work
- ILO Resolution concerning the promotion of measures against risks and accidents arising out of the use of dangerous substances and processes in industry. ILO, 1985
- Prevention of Major Industrial Accidents. An ILO code of practice, 1991
- Your Health and Safety at Work. A modular training package, comprising 11 modules and an instructor's guide. ACTRAV, ILO, 1996
- Safety, Health and Working Conditions: A Training Manual. ILO 1987
- Safety and Health in the Use of Agrochemicals: A Guide. ILO 1991
- Low-cost Ways of Improving Working Conditions: 100 Examples From Asia. K. Kogi et al. ILO 1989
- Environment Action Programme,1993, Public Services International, 01211, Ferney-Voltaire, France
- The Natural Resources Myth. Economist, Dec 23 - Jan 5, 1996

ILO publications can be obtained through major booksellers, or ILO local offices in many countries, or direct from

ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland,

A catalogue or list of new publications will be sent free of charge from the above address.

- Incentives for the Ecologically Sustainable Use of Human and Natural Resources in the Dry-lands of Sub-Saharan Africa. C. Perrings. ILO 1991
- Our Planet, Our Health. World Health Organisation, 1211 Geneva 27
- Forest Action Programme. International Federation of Building and Wood Workers, ICC Building A, 1215 Geneva 15

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