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Ecology

Ecology and Socialism

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"Humanity has faced ecological problems at other times, but these have taken on a new urgency nowadays due to their scope and gravity. Damage to the environment often has an irreversible impact on man and nature and the ecological crisis on the horizon at the dawn of the 21st Century is endangering the lives of millions of people."

I. Foreword

Humanity has faced ecological problems at other times, but these have taken on a new urgency nowadays due to their scope and gravity. Damage to the environment often has an irreversible impact on man and nature and the ecological crisis on the horizon at the dawn of the 21st Century is endangering the lives of millions of people.

Contrary to the prevailing currents in the workers' movement, which have tended to ignore or downplay environmental issues, ecological movements and Green parties can be credited with putting these decisive questions on the agenda. However, the solutions they put forth are often ultimately false ones, as they overlook the inherent link between environmental destruction and the profit logic of capitalism. To seriously deal with ecological dangers, we must break out of the framework created by the profit motive, within the perspective of a democratically planned socialist society.

II. Elements of the ecological crisis

The ecological crisis, as an outcome of human impact on nature, has reached a point that could threaten the very survival of humanity. In keeping with the economic interests of a small minority, new production forms be implemented faster and faster, with no prior evaluation of their ecological consequences. These minority interests also require maintaining production techniques recognised as harmful. This is going on while technological progress is increasing the possibility of acting upon nature, and hence upsetting or destroying it.

The industrial revolution linked to the rise of 19th century capitalism greatly increased the rate at which waste was released into the atmosphere, severely damaging the health of workers and city dwellers. Overall, ecological shock waves of human origin have come fast and furious. And yet, the ecological crisis as we know it is not the linear outcome of industrial development since the 19th century. It is the outcome of a qualitative leap, the massive generalisation of petroleum use and the phenomenal development of the car, the chemical industry and its use in all economic sectors, in particular in agriculture via fertilisers and pesticides.

Since the 1970s, this qualitative leap has become more spectacular following the crisis of bureaucratically planned economies and above all, in a particularly dramatic way, following the combination of economic crisis and free-for-all industrialisation in the "Third World".

Climate Changes

Human activities, relying on fossil fuels (energy production, transport), using firewood for household purposes in the Third World with the ensuing dramatic deforestation, as well as farming activities, make up an essential cause of the

current global warming. These activities are releasing around 7 billion tonnes per annum of greenhouse gasses into the atmosphere (CO₂, CH₄, N₂O, and CFC). Half of this amount is not recycled by oceans or forests. As a result, the greenhouse effect responsible for the maintenance of temperatures suitable for life on the Earth's surface has spun out of control, leading to grave a disturbance of the planet's complex climactic system. Global warming is just one aspect of this. In many regions, the consequences will be catastrophic for the economy of huge human communities. Disturbances in the atmospheric water cycle are the greatest cause for concern, as they alter the system of rains and evaporation, increasing the number and brutality of tropical cyclones. Rising sea levels are probable. Depending on their scale, these imperil specific island and coastline areas. Based on forecast trends, these climactic disturbances will combine with the continuing drop in stratospheric ozone and the correlating increase in carcinogenic solar ultraviolet rays reaching the ground. The destruction of the ozone layer is caused by the effects of Organo-Halogen Compounds; chlorofluorocarbons (CFCs) primarily used in refrigeration and aerosol sprays. Although these have been virtually outlawed, the destructive impact of CFCs already emitted is far from over; it is predicted to last until 2060.

Global changes in regulating mechanisms within and among the primary components of the Earth's environment (atmosphere, oceans, and biosphere) will have repercussions throughout the 21st century. The time frame will vary, but in general it will far exceed the timetables used by the human activities causing them. This fact underlines the urgency of integrating ecological imperatives into the overall organisation of societies.

Air pollution

Industry, transports and the breakdown of more or less durable consumer goods release a great variety of toxic substances into the air. The unbridled and apparently uncontrollable growth of motor vehicle traffic makes this the primary source of sulphur dioxide and carbon monoxide, far ahead of household and industrial heating. Formic aldehyde, mercury and asbestos, for example, are industrial pollutants. These are also found to a very significant extent in everyday consumer products, such as building materials in the case of formaldehyde and asbestos, and mercury in batteries.

City air can contain 1,000 times the level of these toxins found in country air. Air pollution has become a serious blight in major urban centres, both in wealthy countries and in the particularly sprawling, anarchic cities found in poor countries. In the urban setting, this pollution has led to an alarming increase in respiratory ailments: asthma, bronchitis, and lung cancer. European studies have revealed that pollution in Western Europe's major metropolitan areas can be blamed for several thousand deaths per year.

Asbestos gives rise to many fatal forms of cancer among shipyard and building workers. Because these cancers have a latency period, the annual death toll is increasing by leaps and bounds, revealing the extent of the problem. More than 100,000 asbestos-related deaths are predicted in France alone in the first quarter of the 21st century. Protests against asbestos hazards have brought about a sharp reduction in its use in rich industrialised countries, and a search for replacement materials. However, its use in the "Third World" is still on the upswing.

Sulphur dioxide and carbon monoxide are the cause of acid rains, a major cause of damage to the Northern Hemisphere's temperate forests.

Water pollution and soil deterioration

Waste, of household, agricultural or industrial origin alike, is carried off in the world's waters, turning them into gigantic sewers. Continental waters, rivers and lakes are the hardest-hit, but pollution is reaching the sea more and more, via rivers and coastal cities. The direct consequences are the accumulation of heavy metals; mercury, cadmium, etc, and highly toxic organic compounds, in sediment on the ocean floor, riverbeds and lakebeds. Above

all, fertiliser build-up, involving nitrates and phosphates, has led to an unbridled proliferation of algae and water plants. Their breakdown then exhausts the oxygen dissolved in the water: resulting in a massive death of aquatic life.

The state of the oceans is rapidly growing worse, all the more because they are directly polluted by the astronomical quantity of petroleum seepage from underwater drilling sites, vessels outgassing, and even dumping toxic, chemical and radioactive waste.

Water pollution is linked to soil pollution, which is both a cause and effect of certain forms of water and air pollution. This is a consequence of agricultural practices imposed by market pressure: intensive farming (misuse of fertiliser and pesticides) monoculture, crops unsuited to local ecosystems and climates, etc. This means massive soil destruction on a global scale; a toxic soup of pollution, exhaustion, desertification, massive erosion, all bound together with the economic and social causes of hunger affecting 800 million people in the Third World.

Forest destruction

Among the most dramatic manifestations of the ecological crisis, the destruction of the world's forests is among the most disturbing, because of the extent of its consequences. In 50 years, one third of the world's woodlands has disappeared. This has hit tropical countries the hardest. In the industrialised countries, the wooded area has remained relatively stable, but forests are slowly dying from air, oil and soil pollution. However, in the "Third World", deforestation is at the heart of the ecological crisis. Deforestation is the outcome of a vicious cycle of poverty and depletion of arable land. Another cause is the over-harvesting of tropical woods, with no concern for sustainable management. This destroys biodiversity - the tropical forests are home to over 50% of the plant and animal species of our planet - and the forest population's resources, in order to provide a cheaper product for Western building and furniture markets.

Moreover, since 1997, Amazonia, Central America, Russia and Southeast Asia have been hit by increased outbreaks in forest fires. In Indonesia, giant forest fires, which destroyed 10 million hectares in 3 years, have had an impact on 70 million people and cost over 4.5 billion dollars. On the planetary level, deforestation is aggravating the greenhouse effect.

Threats to Biodiversity

The existence of tens of thousands of species is menaced by the countless attacks on ecosystems. One quarter of the Earth's biodiversity could disappear within the next 25 years. In certain cases, these attacks could eventually destabilise the environmental balance, with incalculable consequences on human living conditions.

Biodiversity must be defended, not for sentimental or aesthetic reasons, but on behalf of our own species. Failing to master the consequences of the irreversible changes that it can cause to the environment, humankind must be careful to go about its activities while respecting the ecological balance of nature.

Anyone wishing to protect the ecological balance must attack the very basis of capitalism. Capitalism cares nothing about pollution, exploiting resources with the single objective of short-term gain even if this threatens the very existence of tropical forests, a treasure house of animal and plant species, or marine life.

Likewise, it seeks to take hold of technological innovations such as GMOs, whose spread into the environment is an irreversible and potentially dangerous process.

Instead of remaining a laboratory technique, the production of genetically modified organisms has become one of the key biotechnologies capitalism is using to find new markets. Capitalism is seeking control over the most intimate level, heretofore outside its scope: reproduction and the genetic control of plant and animal species.

Industrial disasters and nuclear risk

The disastrous ecological consequences of capitalist production also take the form of wide-scale accidents, or the potential risk of such accidents, in industrial complexes such as chemical plants and nuclear power plants. The Bhopal disaster, its 15 000 deaths and the sufferings of the many methyl isocyanate victims who are still dying by the hundreds every year, was one of the most tragic examples, along with Chernobyl.

Nuclear power's very nature, the incalculable extent of its possible adverse effects, and especially its very long-term lasting impact, and along with the existence of alternative solutions, quite rightly represent a particularly alarming example of the (aberrant) choices made in terms of development of the productive forces.

Radioactive risk does not only mean the threat of major accidents. After 40 years in existence, the atomic industry has still not found a solution to the nuclear waste storage problem. Threatened with decline, it is now promoting its ecological virtues to promote new electro-nuclear programmes, now at a standstill. The atom is claimed to be a way of reducing CO2 emissions. This claim downplays radioactive pollution hazards (authorised or accidental dumping) and the fact that vehicles are by far the main cause of CO2. Moreover, such a relatively inflexible energy system, based on huge production units and building hundreds of new power plants, would monopolise investments at the expense of other systems (energy saving, renewable energies). Moreover, production over-capacity and loss over distribution systems would encourage power wastage. It would also perpetuate a development model that is harmful in the long run.

Far from creating new emergencies pushing traditional economic, social and political problems to the margins, on the contrary, all the elements of this ecological crisis are closely tied to these concerns.

The ecological crisis has become a dramatic and spreading phenomenon, leading to local and partial disasters. In certain cases these are irreversible, in others they can be reversed in the short or medium term or only over 2 or 3 centuries (the age of many trees). This depends on the conscious choices made by human communities.

III Structural causes of the ecological crisis

Although it cannot escape the laws of nature, in various ways the mode of capitalist production comes into fundamental contradiction with nature and the natural evolution process. For capital, only the quantitative aspect is decisive, determining the relation between labour time and money in the framework of the law of value; qualitative and global relations cannot be taken into consideration.

Capitalist production is based on carrying out cyclical processes in the shortest possible time to get a return on capital invested. Thus, it must impose a rhythm and framework on natural processes that is foreign to them. The exploitation of natural resources cannot take the time needed for their formation or their renewal into account. The spread of commodity production cannot respect pre-existing modes of social organisation. Occupying the space needed for a smooth production process, energy supply and distribution must go ahead without taking the natural environment, fauna and flora into account. It is not capitalism's lack of wisdom that brings about environmental destruction, but the very logic underlying the system. This is why the social democrats call for "qualitative growth"

are stymied by capital's logic: qualitative growth and the law of value are mutually exclusive.

Capitalist rationality determines the movement of individual capital. However, competition among capital makes the system as a whole irrational. The intelligence brought into play to improve production or save on raw materials stops at the company door. The environment foots the bill wherever "nobody" feels responsible- for example, in the case of water, air and soil pollution.

Moreover, competition leads to periodical overproduction crises, revealing that a considerable quantity of energy and materials has been invested in commodities that don't sell. Furthermore, the market promotes the production of superfluous products in use-value terms (advertising, various drugs, arms, etc.) but with an exchange value that makes for big profits. Competition and the race for profits and super-profits are the ultimate reason behind criminal behaviour, recognised as such by capitalist legislation itself: non-respect for environmental regulations, use of toxic substances, inadequate quality testing, falsifying content listings, unauthorised dumping of waste, etc.

The ecological crisis in the imperialist metropolises

The most advanced economic exploitation, i.e. the process of economic quantification of pre-existing natural, social and historic substrata, is found in the developed capitalist countries. Nowadays, commodity production governs all sectors of social life, while the social process of production has become more and more fragmented. Property relations have become more and more centralised - competition among owners of the means of production keeps them from becoming entirely frozen.

This has led to the same major ecological problems in all imperialist countries. Here is yet more proof that these problems cannot be viewed as "breakdowns" or "system failures"; they correspond to this system's logic throughout the world.

The virtually complete exploitation of the last cubic centimetres of land for use as industrial zones, shopping centres, bedroom suburbs, theme parks or administrative zones has greatly increased commuting time and traffic, while the structure of needs has remained essentially unchanged. Transport policy, based on private cars using petroleum fuel, has resulted in chronic traffic congestion, threatening all major metropolitan areas with paralysis and asphyxia.

Particularly in the energy field, centralised property relations have dictated the building of huge fossil fuel or nuclear power stations. This choice is detrimental to air quality and completely irrational from the standpoint of an economical use of energy.

Market irrationality and the profit motive play a decisive role in the problem of waste. It is more and more "advantageous" for each firm to throw away, flush out or burn what is useless for production. Hence, mountains of waste, in particular toxic waste, have practically become a symbol of the society of capitalist overabundance.

The consequences of these basic ecological problems are: destruction of natural sites and urban sprawl, over-congestion of the road system, air pollution caused by the private car, poisoning by the chemical industry, radioactive pollution due to nuclear energy, ever-growing mountains of waste. Capitalism is not capable of correcting these "failings". If natural resources, such as water, wood, soil, are "freely" available, under capitalism they are used up, wasted and polluted, most often without control. They are - and not only in the economic sense - "exogenous factors". They remain conditioned, that is they are objects of the search for private profit. In other words, the limited nature of resources is only seen by those who must purchase them. Their sellers have a basic interest in expansion and oppose any attempt to safeguard them. All attempts at control run counter to capitalists' current push for greater deregulation. If not, they can only be contemplated on the basis of the false premise that the law of value can

distinguish between "good" (environmentally friendly) profits and "bad" profits. Hence, imperialist countries are resigned to trying to patch up problems after the harm is done. At most, this can only result in very limited or partial remedies such as mandatory filters to purify water and air, etc.

Capitalist production also reshapes its own consumers. Thus, individuals' behaviour is a factor aggravating the ecological crisis and hampering a solution to it. However, individual changes in behaviour can only exert a minimal influence on the fundamental environmentally destructive nature of capitalist production.

Ecological crisis in the dependent countries

A study by the United Nations agency for the environment has drawn the lucid conclusion that the ecological problems of the "Third World" are problems of poverty. This would be perfectly just keeping in mind that this poverty is not the outcome of fate, but of the imperialist countries' economic policies and actions. By twisting the facts, it might be possible to present the environmental crisis in the imperialist countries as the consequence of an affluent society and not the outcome of a market economy. However, in the dependent countries of Asia, Africa and Latin America, the relation between economic crisis and ecological crisis comes into sharp focus. For millions of human beings, the growing destruction of the environment and biosphere and the everyday struggle for survival are facets of the same direct experience. Over 800 million people are malnourished, 40 million die every year from hunger or diseases caused by malnutrition. Almost 2 billion do not have regular access to clean drinking water; 25 million die as a result every year. One and a half billion human beings suffer from an acute lack of firewood, their only source of energy. In this part of the world, there is a grave shortage of food, water and fuel, the three essential elements for people's very lives. The UN estimates that approximately 500 million people are "environmental refugees", forced to leave their regions of origin in the wake of drought, floods, soil erosion, the extension of export-oriented agriculture, etc. The fact is that the ecological crisis in these parts of the world is not a "time bomb", or a problem for the future, but an existential crisis here and now.

The primary cause of dire poverty and ecological crisis is the capitalist mode of production. The well-known structures of imperialist dependency and the world market it dominates have subjected the natural environment of dominated countries to far more direct and brutal economic exploitation than is the case in imperialist countries. Environmental destruction according to the world market's needs and multinationals' interests comes into even more flagrant contradiction with the social structures and ways of life handed down through history. In all these countries, imperialism has shaped their territory by imposing an infrastructure almost entirely built up around centres of economic activity dependent on the world market. It is on this basis that "natural resource centres", business centres, and holiday zones, plantations and grazing lands are chosen, for export-oriented production. This puts enormous pressure on people who fall victim to these processes, pushing different ways of life and "outmoded" social functions are pushed towards a country's peripheral regions. The impact has been and continues to be far graver than in the capitalist metropolises, subject as these countries are to processes set in motion by others.

We can also observe the fatal effects of the law of "combined and uneven development" in the dependent countries from an ecological standpoint.

The world market carries its environmentally destructive dynamics and its most agonising contradictions into the most "backward" corners of the world. Its action here is incomparably more devastating, the forces opposing it incomparably weaker. We can set forth a series of structural characteristics of this mechanism:

– Direct exploitation of raw materials for the world market (minerals, wood, cotton, rubber, etc.) and the parallel development of infrastructures, roads, railways, power plants, etc.;

– The transformation of land into farmlands or pasture reserved for export production, via a land-clearing policy involving heavy use of chemical fertilisers and pesticides with the resulting pollution.

These two processes make the land question the great burning issue in most of the dependent countries. The rural population is pushed into regions unable to sustain permanent settlement or agriculture. These people have no choice but to clear the land and use farming methods that only speed up the exhaustion of land and its erosion. Clear-cutting hillsides, burning tropical forests, settling arid or flood-risk regions, the destruction of fertile soil layers, etc. compound the risk of long-term climate changes and "natural disasters".

An urbanisation brought about by a specific economic structure and the land question. According to UN estimates, cities in the dependent countries are growing three times faster than in the industrialised capitalist countries. In these cities, the usual urban problems are even more catastrophic for the environment and living conditions. Air pollution caused by motor-vehicle traffic and household heating is an acute threat. The quality of clean and purified water is the second problem facing cities in the dependent countries.

Waste disposal is the third. In most major cities in Asia, Africa and Latin America, rubbish is simply piled up or burnt in the open air.

For most of the population of dependent countries, energy supply is a problem of everyday survival. 1.5 billion human beings are short of firewood. The annual working time devoted to gathering firewood (or other fuel sources such as manure, plant residues, etc.) has increased fourfold, sometimes reaching 190 to 300 working days yearly. Especially in rural areas near cities, but also in many other regions, forests are clear-cut because of the energy shortage.

The problem facing dependent countries most spoken about these days is the debt to banks and imperialist governments. This has an impact on ecological crisis because the debt requires stepping up the priority on export production, in turn increasing acute poverty and the rural exodus. In the 1990-1995 period, deforestation in 33 African countries ranked among the poorest and most indebted was 50% greater than forest destruction in other African countries, and 140% greater than the average rate of world deforestation. At the same time, there are no resources to finance conservation measures. International financial institutions, such as the World Bank and the International Monetary Fund, exact a higher and higher toll on man and nature for the consequences of debt.

All of this is cynically rounded out by a series of direct acts of destruction of nature and ecological crimes committed by imperialist multinationals. Hazardous production units (especially in the chemical industry) are transferred to the dependent countries. There they not only benefit from cheap labour but also can pollute the environment with impunity.

The governments in most dependent countries are powerless in the face of ecological crisis. Their connection to imperialist interests and their own privileges or class interests extend economic dependency and ecological crisis. Even certain international aid programmes (to fight hunger, to fight ecological disasters or recent plans for a partial cancellation of the debt in exchange for environmental protection measures) often merely contribute to enriching elites in power.

Solving the ecological crisis in the dependent countries is unthinkable without breaking dependency on imperialism. Seeking "modernisation" through credits and debt to solve urgent social problems has been an error that only compounds the situation. This is truer still for the ecological crisis. Poverty and economic dependency force millions of people take part in behaviour causing dire harm to the environment, but without which they could not even survive. This means the process of anti-imperialist revolution, "permanent" revolution, in the dependent countries must consciously take up ecological issues and make them part of their programme of struggle against capitalist plunder.

This is the condition for successfully building alternative, socialist production relations.

Ecological crisis in the former bureaucratised societies

Despite the disappearance of the USSR and most societies patterned on the Soviet model, it is necessary to briefly examine their environmental policies. The ecological track record of the USSR and countries with a bureaucratic central planning system is as bad, if not worse, as the imperialist metropolises, especially in terms of air, water and ground pollution, and nuclear power - Chernobyl! - and problems facing major metropolitan areas.

One of the reasons for this situation is the fact that these societies only partially succeeded in overcoming the capitalist law of value and the objective restrictions on production it entails. In many key production sectors, dependency on capitalism and the world market was still present. Exploitation of natural resources for an export economy and dependence on products and technologies derived from capitalist industries also led to an inevitable destruction of the environment in these societies too. This happened in a way comparable what we see in dependent countries.

The planned economy was an attempt to develop a directly social economy. Contrary to capitalism where the usefulness of labour is based on the market alone, that is, the ability to sell products, non-capitalist societies attempted to determine and plan social needs before production. It is obvious that this attempt can only succeed if all human needs and specific interests are brought into an overall process of democratic deliberation and decision-making. When an actual shortage must be shared out, democracy becomes even more essential. However, the bureaucratisation of transitional societies completely eliminated democracy. The multitude of social and national, cultural and economic needs of different people became standardised, and forcibly inserted into a plan dictated from above. As all qualitative aspects were buried along with democracy, the determining characteristics of the plan could only be quantitative standards and rates of growth. Thus, transitional societies put the accent on quantitative increase in growth, sometimes even more than capitalist societies. These rates were set forth by decree and enforced with repression. Protecting resources and the environment were at best included in such plans in quantitative terms (number of purification stations, filters, certain budget outlays, etc.). This planning was from the outset beset with errors and huge oversights in planning (with a corresponding misuse of resources). Without social controls, these were only rectified when they were finally recognised "higher up".

Furthermore, the different parts of the plan corresponded to the interests of different fractions of the bureaucracy that set them. This is how the gigantism that was so typical of the USSR and other bureaucratic states came into being.

The bigger, larger-scale and more centralised the projects were (example: changing the course of Siberian rivers), the more power it meant for the bureaucrats. Since the 1970s, bureaucrats concerned with environmental issues did come on the scene, but they lacked clout and remained stuck in small, low-level departments.

Optimism and faith in progress were a tenet of the bureaucracy's ideology. Bureaucracies put forth the prospect of "competition between the two systems" and "overtaking" capitalist societies. From this standpoint, the capitalist consumer and modernisation models that caused such environmental harm were valued and taken up as ideological values playing a part in framing the plan.

The bureaucracy only used models based on quantifying natural resources (namely, models comparable to those used by conservative bourgeois economists).

It goes without saying that the ecological crisis can only be exacerbated in the context of economic pillage and free-for-all capitalism now reigning in Russia since the fall of the USSR, with the blessing of Western powers and the

IMF.

IV. Workers' movement and ecology

Ecologists accuse Marx and Engels of productivism. Is this accusation justified?

No, to the extent that no one had spoken out with such force as Marx against the capitalist logic of production for production's sake, capital accumulation, wealth and commodity production as an end in itself. The very idea of socialism - contrary to the pathetic bureaucratic caricatures of it - is producing use value, goods necessary for the satisfaction of human needs. The supreme aim of technical progress in Marx's eyes is not an infinite increase in goods ("having") but a shorter working day, and more leisure time ("being").

However, it is true that sometimes we find in Marx and Engels - and even more in later Marxism - a tendency to make "development of productive forces" the main vector of progress, and a relatively uncritical stance towards industrial civilisation, especially in terms of its destructive relationship to the environment. The following passage of the *Gründrisse* is a telling example of Marx's too uncritical admiration for the "civilising" mission of capitalist production, and its brutal instrumentalisation of nature:

"Thus capital creates the bourgeois society and the universal appropriation of nature as well as of the social bond itself by the members of society. Hence the great civilising influence of capital; its production of a stage of society in comparison to which all earlier ones appear as mere local developments of humanity and as nature-idolatry. For the first time, nature becomes purely and object for humankind, purely a matter of utility; ceases to be recognised as a power for itself; and the theoretical discovery of its autonomous laws appears merely as a ruse so as to subjugate it under human needs, whether as an object of consumption or as a means of production".

On the other hand, we also find texts by Marx explicitly mentioning the ravages Capital has wrought on the natural environment - bearing witness to a dialectical vision of the contradictions of "progress" brought about by productive forces - for example, in the famous passage on capitalist agriculture in *Capital*:

"The increased productiveness and quantity of the labour set in motion are bought at the cost of laying waste and consuming by disease labour-power itself. Moreover, all progress in capitalistic agriculture is a progress in the art, not only of robbing the labourer, but of robbing the soil; all progress in increasing the fertility of the soil for a given time, is a progress towards ruining the lasting sources of that fertility. The more a country starts its development on the foundation of modern industry, like the United States, for example, the more rapid is this process of destruction. Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth-the soil and the labourer."

Even in Engels, who so often celebrated man's "mastery" and "domination" over nature, we can find texts that call our attention more explicitly to the dangers of such an outlook. For example, we can mention the following passage in the article, "The part played by labour in the transition from ape to man" (1876)

"Let us not, however, flatter ourselves overmuch on account of our human victories over nature. For each such victory nature takes its revenge on us. Each victory, it is true, in the first place brings about the results we expected, but in the second and third places it has quite different, unforeseen effects which only too often cancel the first. The people who, in Mesopotamia, Greece, Asia Minor and elsewhere, destroyed the forests to obtain cultivable land, never dreamed that by removing along with the forests the collecting centres and reservoirs of moisture, they were

laying the basis for the present forlorn state of those countries. (...)

Thus at every step we are reminded that we by no means rule over nature like a conqueror over a foreign people; like someone standing outside nature - but that we, with flesh, blood and brain, belong to nature and exist in its midst, and that all our mastery of it consists in the fact that we have the advantage over all other creatures of being able to learn its laws and apply them correctly".

It would not be difficult to find other examples. The fact remains, however, that Marx and Engels lack an overall ecological outlook. The ecology question is one of the greatest challenges for a renewal of Marxist thought at the dawn of the 21st century. It demands of Marxists a thorough critical reappraisal of their traditional concept of "productive forces" and a radical break with the ideology of linear progress and the technological and economic paradigm of modern industrial civilisation.

Parallel to the development of reformism in the ranks of the workers' movement, Marx and Engels' critical reflection on the threat capitalist civilisation poses to nature was downplayed. Reformism took up the productivist concepts/outlook of bourgeois society just as it was becoming an integral part of it by accepting its major institutions (State, army, legislation, etc"). For example, early in the 20th century, the Deutscher Metallarbeiterverband (DMV), the metal workers' organisation, dominated by social democracy, explained in a telling statement: "The faster technical development is, the faster the capitalist mode of production will have reached the point where it will block by itself and will have to be replaced by a higher mode of production,"

Social democracy and Stalinism, despite their disagreements on many questions, shared a productivist concept of the economy and a profound lack of sensitivity to environmental questions. We must recognise that revolutionary currents in general - and the Fourth International in particular - were very late in integrating the ecological question. The persistence of ecological disasters, the growth of environmental protection movements, these movements' partial victories, and their attempts to structure themselves politically ("Green" parties, etc.) have led to differentiations within the workers' movement. In a series of countries, entire unions or at least strong minorities within their ranks oppose the "peaceful" use of nuclear energy - CGIL in Italy, British miners - and are displaying a heightened sensitivity to ecological questions: CUT in Brazil, SUD in France, the Workers' Commissions in Spain, IG-Metall in Germany, etc.

At present, we can distinguish among four currents in parties and unions that claim to speak for the workers:

- a) The "hard-core" fraction that wants to keep on as if nothing has changed. Even this fraction has had to make some adjustments, in light of the catastrophic developments for the environment. This current is now calling for emission standards and new regulations, but advocates continued use of nuclear power. Without revising its short-sighted positions, it has declared its agreement with "patching up" the ecology, especially if it opens up new markets.
- b) A technocratic current that thinks it can solve ecological problems via high-tech solutions. Indeed, most often these would only shift the problems round: for example, what to do with the enormous quantities of filtration residues, purification sludge and other waste? Peter Glotz of the German SPD is calling for co-operation with the "end of the pipe technology" fraction of major capital. Through an alliance among "the traditional left, technical elites and critical minorities of capitalists with a sound outlook in terms of growth", socially directed innovation could be achieved. He expressly rejects any challenge to private property over the means of production.
- c) The third current that could be called "reformist-ecologist", also refuses to speak about production relations. Once again, they claim it is possible to rid capitalism, or as they put it delicately, "industrial society", of its sins against the ecology. Erhard Eppler, as chairman of the German SPD's "Fundamental Values Commission" explained: "More than

ever, the task of social democracy is to proceed, through a new policy of reforms, with democratic, human and ecological corrections to industrial society."

d) The fourth current, in the minority, but far from negligible in numbers, is eco-socialism, integrating the fundamental achievements of Marxism - while ridding it of its productivist dross. Eco-socialists understand that market and profit logic (as well as the authoritarianism of the defunct "people's democracies") are incompatible with ecological demands. While criticising the ideology put forth by the leading currents of the workers' movement, they understand that workers and their organisations are an essential force for transforming the system.

Eco-socialism is the current in the workers' and ecology movements most sensitive to the interests of workers and peoples of the South. It breaks with the productivist ideology of progress - in its capitalist and/or bureaucratic form (so-called "actually existing socialism") - and opposes the infinite expansion of an environmentally destructive mode of production and consumption.

It understands that "sustainable development" is impossible within the framework of the capitalist market economy.

As revolutionaries, our objective is to join forces with this current and convince workers that partial reforms are totally inadequate. Micro-rationality must be replaced with socialist, ecologist macro-rationality, calling for a genuine change in civilisation. This is impossible without an in-depth technological reorientation, seeking the replacement of current energy sources with other, non-polluting and renewable ones, such as solar energy. This means the first issue at hand is the question of control over the means of production, and above all over decisions relating to investments and technological change.

An overall reorganisation of the mode of production and consumption is needed, based on criteria foreign to the capitalist market: people's real needs and environmental safeguards. In other words, an economy in transition to socialism, based on the peoples' own democratic choices of priorities and investments - and not the "laws of the market" or an all-seeing politburo. A planned economy, able to find lasting ways of overcoming the tensions between satisfying social needs and ecological imperatives. A transition leading to an alternative way of life, a new civilisation, beyond the reign of money, consumer habits artificially fuelled by advertising, and the endless production of environmentally harmful goods (the private car!).

V. Achievements and limits of the ecology movement

The ecology movement's fundamental achievement, which has brought about an in-depth change in public awareness of environmental questions, has been and remains the understanding of the extent to which late capitalism has destroyed the environment. Destruction of nature has reached a point that imperils all humanity. Here, as in the case of a world nuclear war, it is a question of survival. However, contrary to the danger of nuclear destruction, it is a question that is always "new" and more and more obviously becoming more and more serious. The ecology movement's fundamental achievement is at the same time its basic limit. Since this movement views the environmental question as vital to all humanity, it seeks out interclass solutions and consequently, fails to call upon adequate means (class struggle against capital).

Another achievement of the ecology movement is the way it questions the concept of "progress". It has demonstrated the shortcomings of the Marxist analysis of late capitalism. We can no longer speak as during the beginning of capitalist development of a positive development of the productive forces, only trammelled by private ownership of the means of production or developed at the expense of the proletariat. More and more, capitalism, having survived

much longer than historically necessary for the development of the productive forces, is transforming productive forces into destructive ones. But this also means that these forces cannot be liberated as such, that is, used in a socialist system on behalf of all. They will have to be vetted and critically analysed. This is not merely a theoretical question, but also a very practical one, involving a criticism of the idea of "overtaking capitalism", so typical of Stalinist bureaucratic thought. Moreover, a more elaborate analysis of the material side of production (use value) is being made for the first time, by asking which products are desirable from an ecological and social viewpoint etc.

After the setbacks following the 1968 movement, the ecology movement has once again brought a utopian dimension into politics. Discussions about a fundamental change in the social system, another way of living and producing, are re-introduced on the basis of ecological demands. The aforementioned debate about use value of products also encompasses a discussion of socially useful production. New utopian ideas about a different society are being voiced, and concrete "reconversion plans" sketched out.

The ecology movement first developed in Europe. It involved mass mobilisations, even in countries where the workers' movement was on the defensive, such as Austria, Switzerland and Germany. Militant and concrete forms of struggle, such as demonstrations, blockades, and occupations of sites gave rise to a "culture of resistance". At first these struggles focused on the nuclear question above all, but the movement takes up and mobilises around other questions, such as air and water pollution and GMOs. Scandals such as the "mad cow" crisis have raised public awareness about "junk food" and the dangers arising from the logic of the capitalist market. In France, the Confédération paysanne (Small Farmers' Union) was the catalyst of a radical dynamic. Starting out from a symbolic action (dismantling a McDonald's) in retaliation against US sanctions based on France's ban on importing hormone-treated beef, the struggle widened to take on the WTO - with support from trade unions, ecological organisations and left-wing parties, and strong sympathy in public opinion. Strong support was shown in June 2000, at the rally in solidarity with the small farmers facing trial in Millau (France).

Major ecological mobilisations have also taken place in the USA, and given rise to a complex, heterogeneous movement, ranging from "deep ecology" - which claims to give priority to plant and other animal species over humans, to eco-socialism. The recent Spring 2000 mobilisations in Seattle displayed this movement's strength and the willingness of several of its components - for example the major environmental association "Friends of the Earth" - to join forces with unions and the left in the fight against the WTO and an increasingly commodified world. Seattle also allowed for an initial convergence in the struggle among movements from North America, Europe - the Confédération Paysanne was represented by its spokesperson, José Bové - and the Third World.

It would be very mistaken to think ecological issues only concern the countries of the North - a luxury for wealthy societies. More and more, social movements with an ecological dimension are emerging on the periphery of capitalism, the "South".

These movements are reacting to deepening ecological problems in Asia, Africa and Latin America, a consequence of imperialist countries' deliberate policy of "exporting pollution", and the unbridled productivity demanded by "competitiveness". We are witnessing the appearance of popular mobilisations in the South in defence of peasant agriculture, communal access to natural resources, threatened with destruction by the aggressive expansion of the market (or the State). Other struggles are arising to fight the damage to the immediate environment brought about by unequal exchange, dependent industrialisation and the development of capitalism (agribusiness) in the countryside. Often, these movements do not define themselves as ecological, but their struggle still has an essential ecological dimension. It goes without saying that these movements are not opposed to improvements made by technological progress. On the contrary, the demand for electricity, running water, proper sewage and more medical dispensaries ranks high in their list of demands. What they are refusing is the pollution and destruction of their natural surroundings in the name of "market laws" and the imperatives of capitalist "expansion".

A 1991 text by Peruvian peasant leader Hugo Blanco (of the Fourth International) is a remarkable expression of the meaning of this "ecology of the poor". "At first glance, defenders of the environment or conservationists seem like nice, rather eccentric fellows, whose main goal in life is preventing the extinction of blue whales or pandas. The common people have more pressing concerns, for example where their next meal will come from. However, in Peru there are a great number of people defending the environment. Of course, if you told them 'you are ecologists', they would probably answer, 'ecologists, my eye'. And yet: who can deny the inhabitants of the town of Ilo and surrounding villages, struggling against pollution caused by the Southern Peru Copper corporation, are defending the environment? And isn't the Amazonian population totally ecologist, ready to die to defend their forests from pillage? Or the poor population of Lima, protesting tainted water?"

Brazil is among the countries where the link between social and environmental issues has been made on a mass scale. We can see the Landless Peasants Movement (MST) mobilising against GMOs, in a direct confrontation with the major multinational Monsanto. Municipalities and provinces governed by the Workers Party (PT) are attempting to make ecological aims a part of their participatory democracy programme. The Rio Grande do Sul provincial government, close to the MST and the PT, wants to ban GMOs from the region. Wealthy landowners in the region are indignant, going on record against what call an "archaic outlook". They view the struggle against transgenic seed as a "conspiracy to impose agricultural reform".

Indigenous peoples, living in direct contact with the forest, are among the primary victims of the "modernisation" imposed by agrarian capitalism. As a result, they are mobilising in many Latin American countries to defend their traditional way of life, in harmony with the environment, against the bulldozers of capitalist "civilisation". Among the countless manifestations of the Brazilian "ecology of the poor", one movement has stood out as particularly exemplary, by its social and ecological, local and planetary, "red" and "green" scope. Namely, the fight of Chico Mendes and the Coalition of Forest Peoples in defence of the Brazilian Amazon region, against the destructive appetites of major landowners and multinational agribusiness.

Let us briefly recall the major events in this confrontation. Chico Mendes was a trade-union activist, with ties to the (CUT) and the Brazilian Workers' Party (PT). Explicitly referring to socialism and ecology, in the early 80s, Mendes organised land occupations by the seringueiros, peasants who lived by tapping rubber trees, against latifundistas who were sending in bulldozers to cut down the forest and replace it with grazing lands. Afterwards, he succeeded in bringing together peasants, farm workers, seringueiros, trade unionists and indigenous tribes - with the support of rank-and-file Church communities - in the Alliance of Forest Peoples, that was able to thwart many clear-cutting attempts. International awareness of these actions warranted him the Global Ecological Prize in 1987. However, a short time afterwards, in December 1988, latifundistas exacted a heavy price for this ecological struggle by having hired killers murder him.

Given the links forged between social and ecological struggles, peasant and indigenous resistance, survival of local populations and safeguard of a global imperative (protection of the last major tropical forest), this movement can become a paradigm for future popular mobilisations in the "South".

In certain countries - especially in Europe - the ecology movement has succeeded in winning many reforms, partly slowing down the breakneck pace of environmental destruction. For example, practically no new nuclear power plants are being built, the production of certain chemical products (CFCs, fertilisers, etc.) has been limited, and stringent standards have been enacted for certain factories, motor vehicles, etc. A capitalist environmental industry has emerged, and ecological reforms have even found their way into bourgeois party policy platforms.

And yet, despite all attempts at reform, despite the environmental industry, destruction on the global level has become more serious than ever before.

Pollution of the seas, clearing of tropical forests and climate changes all show that the global dynamics of ecological crisis remain unchanged. From this standpoint, this crisis shows the need for a fundamental change in our society; above beyond any reforms that may see the light of day.

As the ecology movement has no coherent revolutionary programme and fails to see the workers as a revolutionary subject, it is a long way from fulfilling its aspiration to become a new social force that can occupy or inherit the place of the workers movement. Nevertheless, if we leave out explicitly bourgeois or reactionary groups, small in numbers, the ecology movement remains an important ally of revolutionaries in the overall struggle against the capitalist system.

VI. Environmental problems and bourgeois domination

Due to of the impact of capitalist production on the environment, destruction of the natural basis for human societies has reached a new level. This has become a problem in and of itself for bourgeois order and ideology.

– The ecological crisis is world-wide and, in the competitive context inherent to capitalism, can only be viewed only as a common evil;

– Certain causes of the ecological crisis go back many years, others are the products of the combined development of various separate factors. For this reason, it is difficult to establish and date their temporal and physiological causes. In the same vein, mastering the ecological crisis calls for time and investments that would be the undoing of all bourgeois concepts of input/output cycles.

– Finally, contrary to what is observed in classical economic crises, in capitalism's harmful social consequences and even in the aftermath of military conflicts, dominated and exploited classes can only be made to foot part of the bill for ecological crisis. However, it is undeniable that oppressed classes bear the brunt of the burden, especially in dependent countries. This is truer still, given the interaction between social and economic crisis and ecological crisis.

The growing awareness of ecological crisis and the ecology movement developing since the early 1960s, have represented a vigorous attack on one of the key concepts in bourgeois ideology - the idea that the bourgeois social and economic order is capable of guaranteeing continuous "progress for all", and that harnessing nature is inherently positive and that all problems pertaining to it could be solved.

Up against this ideological challenge, there have been attempts at updating bourgeois ideology. The first, known throughout the world, was the Club of Rome report ("The Limits to Growth", 1972). This report documented the rapid progress of environmental destruction and put forth a supra-national policy against demographic growth, wastage of natural resources, environmental destruction, etc. This study, and others following, were a double-edged sword. On the one hand, science and bourgeois ideology retook the initiative on environmental questions and undertook a discussion on the prognosis and the solutions to be put forth. On the other, these studies shored up pessimistic views on the world's future and were a further impetus to the ecology movement.

The capitalist world economy's existing order lost its aura of superiority; its finality and its mechanisms were questioned from within. At the same time, these analyses led to catalogues of demands that tended to promote world planning and a political regulation of the economy. Thus, they came into direct conflict with the capitalist market economy, economic liberalism and government deregulation offensives on the agenda throughout the world at the

time.

No later than the mid-1980s, a second bourgeois offensive on the environmental terrain proved necessary. Thereafter, it became necessary to provide solutions, especially in terms of concrete policy, to these contradictions. The Bruntland report ("Our Common Future") adopted by the UN General Assembly in 1988, was an expression of this. It is already entirely marked by the bourgeois conviction that although capitalism unfortunately harms the environment, it is also in a position to make the necessary corrections. Thus, it claimed to bring together the elements for a more balanced form of growth ("sustainable development"). The 1990s saw a deepening of the contradiction between promises of new international regulations of globalised capitalism and this very system's brutal social and environmental impact. The Rio Declaration, which came out of the Earth Summit (1992) certainly set forth certain principles, such as the precaution principle, which did represent progress in awareness about the elements of the ecological crisis. Neither Agenda 21, a giant mixed bag of 2500 measures, nor the international conventions on biodiversity and climate change have led to the radical solutions needed. With the birth of the WTO further subjecting the environment to the effects of liberalised international trade, these conventions have had very little effect. Proclamations in defence of biodiversity are powerless against ongoing damage to the natural environment.

On the political level, they run up against the interests of agrochemical and pharmaceutical multinationals that seek to take hold of living organisms by increased use of GMOs and patenting genomes. The Kyoto Protocol (1997) on the greenhouse effect does not put any onus on rich countries to implement measures aimed at meeting the very modest objective of reducing greenhouse-gas emissions. 125 billion dollars over 10 years had been announced in Rio for environmental defence policies on the world scale. In 1996, only 315 million dollars had been invested. Between the reformist ideas put forth by the Bruntland report, and again in Rio, and the dominant ultra-liberal imperialist model, the latter has won the day for the time being.

Today, a practical approach to environmental problems is part of every bourgeois government's programme. In general, there is an attempt to set limits to air, soil and water pollution. To these are added gradual plans to reduce the dangerous effects of production-process residues. When all is said and done, these are band-aid measures that do not counteract the real destruction taking place. Economic programmes and policy orientations concerning the "ecological market economy" have also taken on importance. Up until now, attempts to re-orient the capitalist economy to an environmentally friendly functioning have not got off the drawing table.

However, in the context of capitalist globalisation, a vast offensive is underway to impose a system of "marketing the right to pollute" on the world level in order to reduce the quantity of greenhouse gases. Advocated by the United States, this mechanism was accepted by the European Union. This is a dangerous development that must be fought. Firstly, it opens the way to strengthening under-developed countries' dependency on the North. In a mechanism assigning each country an exchangeable pollution quota, the decision-making power belongs to those who hold financial power to trade in pollution as they see fit. The highly indebted countries of the South and the East would run the risk of selling their quota to the Northern countries, though the latter pollute the most by far.

Moreover, the system aims to make pollution a commodity, hence a source of profit. How could we imagine under such conditions that this would lead to an effective reduction in pollution?

Finally, it must be emphasised that the purpose of this mechanism, the key element of the liberal offensive in the environmental field, is to defuse the subversive power of the ecological critique, which raises a challenge to the overall functioning of the capitalist system. It aims at restoring credibility to the idea that the market is the best instrument in the fight against pollution, that more capitalism would make for intrinsically "cleaner" capitalism.

This idea must be fought, just like the thesis whereby environmental protection could become the motor behind "a new modernisation of the capitalist economy". A great gap separates the rich States from the poor States. While in

wealthy imperialist countries, some progress has been made in stemming some of the most problems of pollution and destruction, in the poor countries, even the slightest necessary measures fail due to lack of funding or in the face of the interests of a handful of firms that succeed in making a profit precisely by damaging the environment.

VII. Experiences in the political organisation of the ecology movement

In a growing number of countries, Green parties are developing. In Western Europe, they have gained parliamentary representation in countries as different as Germany, France, Austria, Belgium, Sweden and Portugal and constitute a significant European Parliamentary group with 47 Members. They now take part alongside left-wing coalitions in governments in three countries in the Union: Germany, France and Belgium. Green parties are even found in dependent countries (Brazil, Turkey, etc.) In the United States, Ralph Nader's candidacy in the presidential race symbolises the political emergence of a front uniting environmentalists, youth and trade unionists, on the basis of anti-globalisation struggles.

Of course, the development of green organisations and parties over the past twenty years or so can be explained by the emergence of ecological crisis on a global scale. However, it cannot be understood without supplementary political factors, such as the lack of overall perspectives by traditional leaderships of the workers movement or the absence of revolutionary breakthroughs in capitalist Europe since 1968.

It is completely wrong to put all the different "Green" experiences in the same bag. Depending on the countries, political cultures, their concrete historical origins, they have specific characteristics. Their palette ranges from a strong influence of bourgeois and petit bourgeois forces to the coexistence of leftist, alternative and eco-socialists, and includes reformist Green currents.

We can say in general and with all due caution:

- these are attempts at organising within the reformist left, most often somewhere to the left of the traditional leaderships;
- although 75% of their social base is made up of salaried employees, these currents do not view themselves as a part of the workers' movement;
- while they often began as informal electoral structures based on ecology-centred platforms, Green movements have taken critical stands in other areas too (social policy, arms race, Third World, etc.).

The Greens' activity bears the stamp of a combination of frequently correct criticisms of sectoral social injustices alongside illusory reformist "strategies". In most cases, government or parliamentary activity virtually stifles Green Party grassroots activism, fosters the appearance of traditional forms of power delegation, and by so doing tends to undermine the radical nature of its movement. Worse still, the German Greens, for example, are in the process of losing all the utopian power embodied by the ecological critique, and are becoming a simple "party of reform" among others. When the Grünen entered the government in late 1998, this brought about a veritable political earthquake in their ranks. The shock waves continued with a difficult compromise on the nuclear issue, the war in Kosovo and the intensified neo-liberal course of government policy. Just the same, it is fruitless to speculate on the rhythms and forms of changes ecologist parties may undergo and to what extent the very nature of the Greens will be transformed by the choices and policy shifts they make.

Revolutionary Marxists judge political actors first of all not on the basis of their claims, their programmes or their awareness of their own role, but on the basis of their actual function in the class struggle. In general, we can affirm that the appearance of Green organisations and parties has not been a step backward. On the contrary, in many cases, it has broadened the left's action.

The Greens must not be ignored, on the contrary, an active policy must be developed in their direction: common actions, debates on their theoretical positions, etc. In certain countries, protest parties and ecological movements have arisen, forming electoral coalitions and harnessing a segment of critical opinion. It is up to each section of the International to concretely decide the best form of co-operation with such parties or movements.

VIII. The Fourth International and the ecological crisis

As we have seen in Chapter 4, we find the premises of a radical ecological criticism of capitalism in the original Marxist texts. But, as was the case for most parties in the workers' movement, our International failed to take it up in the first years of its existence. For example, it would be useless to look for it in the Transitional Programme, the basic programmatic document of the 1938 founding congress. In the period following the Second World War, revolutionary Marxists did not ignore environmental destruction or air and water pollution. However, these phenomena were seen as one of the negative consequences of an exploitative, inhuman system and not viewed as a global phenomenon threatening to destroy the very basis of all life.

This has changed since the early 1970s, when capitalist society's self-destructive tendency became a widely discussed subject, a subject of debate for such bourgeois ideologues as the Club of Rome in 1972. Articles and studies written by members of our movement appeared.

But the real test for organisations of the workers' movement was the birth of a popular movement against nuclear energy, especially in Japan, Western Europe and the United States.

Practically all the sections of the Fourth International have been involved in these mass movements, although very few sections found ways of consolidating their ecology work when the anti-nuclear movement went into decline. The experience of these movements did make its way into our discussions for the World Congresses. In the 10th Congress's texts, ecology and related problems were not even mentioned. However, at the following congress, in 1979, the struggle against the nuclear industry was viewed as a "question of survival for the working class" and it declared that the task of the International and its sections was to "strengthen the movement by bringing industrial workers" into the struggle. At the 1985 congress, the positions were further developed. The documents provide a more detailed analysis for each of the three sectors of the world revolution. The main resolution called on the International and its sections to put far greater emphasis on the ecology question in their propaganda and their activities and organise common actions alongside ecology movements. In 1990, a commission made up of different sections of the International drew up a draft resolution on ecology, which was presented during discussions at the 13th Congress, but it was decided to hold further debates before adopting a resolution.

Today, the Fourth International views environmental destruction as one of the main threats to humanity, a problem giving a new meaning to the Rosa Luxemburg's famous formula: Socialism or Barbarism. It sees a commitment by the workers' movement and its organisations in the struggle against planetary destruction as its primary task in this area. It is striving to pave the way for co-operation between the social movement and the ecology movement, not only against different forms of destruction, but also against the system causing them in the first place. It wants to contribute to discussions in these movements and tries to counteract widespread illusions on the possibility of "clean"

capitalism.

In many countries, the International is taking an active part in ongoing struggles, such as the struggle against GMOs and the destruction of the Amazonian forest in Brazil. The European sections are increasingly involved in ecology movements in their own countries. In our analyses, the ecological issue is one of the most important poles around which the workers' movement must reorganise.

All of this does not mean that there have not been problems bringing these "new issues" into our movement's activities. Many comrades have continued to look upon ecological problems as one contradiction of capitalism among many others. They have not seen them as problems closely linked to everyday struggles for the survival of the working class, against subhuman living and working conditions and the threat of war. Most of the sections only started pondering ecological questions when they made the headlines in the news following actions by other forces. As a result, the debate within the International has taken shape rather slowly. While other currents and individuals have been discussing the question of ecology and socialism for many decades, revolutionary Marxists have remained relatively silent. It is becoming clearer and clearer that Marxists must make a special effort to apply their method to the real issues at hand. It is no longer possible to simply take a few elements of ecological thought and give them a dab of red paint.

The Fourth International does not wish to simply take part in discussions on concrete ecological policy. It also wants to take the political and organisational steps forward necessary for mass actions. Only through the action of mass movements can current conditions be changed.

IX. Action Programme

Today, throughout the world there is a broad range of initiatives and movements against the pillage and destruction of nature. The Fourth International supports these initiatives and these movements and takes part in them, sometimes critically, because the general outlook of certain ecologists is at times rather confused. The experiences of the ecology movement prove that only broad mobilisations and mass protests make it possible to win over public opinion and obtain real results.

To a large extent, ecological crisis and social crisis are stoked by identical mechanisms. The interests of major economic lobbies, the ever-more exclusive dictatorship of "the markets", the world order incarnated by the WTO, IMF, WB and G8, etc., are combining to bleed humans and nature dry. Common factors are at work in the contemporary ecological and social crises, common remedies can and must be put forth. It is essential to break the stranglehold of "economic liberalism" and put human needs and ecological imperatives at the forefront.

This is why there is community of ecological and social struggle, and common terrain for convergence.

1. Defence of Public Services

The example of transport is a clear example of the extent to which public policy is required for an adequate response to social and ecological imperatives. In Europe, the logic of the markets requires cutting the railway system to "profitable" technologies and routes, relying on roads and highways as the solution for everything else. Social needs (economical public transport, a complete system serving the entire territory, decent salaries and working conditions) and ecological ones (reducing the most polluting, physically-destructive and energy-intensive forms of transport) requires the development of public transport, in a public service logic. The same goes for other areas. But this

observation does not close the debate on how public services must be organised in the modern world. In fact, State monopolies tend to develop their policies on the basis of non-democratic objectives. (In the energy field, we can mention links between petroleum producers and imperialist interventions in Africa, or links between civil and military nuclear uses). They use narrowly capitalist management approaches and productive models, applying profitability/efficiency standards copied from private monopolies.

2. The struggle against pollution

We have become more and more aware of the human costs (damage to health, rising prices, etc.) and natural costs (attacks on biodiversity) of pollution, as well as the role played by many entrenched economic interests in aggravating this problem. The dominant place of the car, the resulting air pollution and growing health problems in urban centres. The power of agribusiness, brutal pollution of water systems, and almost irreversible pollution of ground water. The weight of the nuclear lobby and the accumulation of radioactive waste over very long periods, in France and other countries. The role played by major private interests in the socially unacceptable increase in the cost of drinking water in the North - and massive lack of access to drinking water in the South. In each of these areas, ecological and social struggles require counterpoising an alternative logic to that put forth by the dominant economic forces.

The gravity of pollution and public health problems has led to increased public awareness. It has become more difficult to present so-called ecological issues as marginal questions, as unrelated to social questions, or as elitist concerns, and petit-bourgeois luxuries. In Europe, the "mad cow" crisis probably marked a sea change, analogous to Chernobyl in the area of nuclear power. It cast a light on the serious threat posed by the agribusiness mode of production.

It is also necessary to combat illusory strategies such as a market for the right to pollute that Northern countries are attempting to impose on the planet. Pollution should be eradicated, not sold to the highest bidder.

3. In defence of employment

An environmental protection policy would create new jobs in many fields. It is also essential to point out that the dominant economic logic, which overexploits the natural environment, also gives rise to unemployment. This is clearly the case with agribusiness, which is emptying the countryside both of its natural (drastic reduction in the variety of landscapes and biodiversity) and human features (drastic loss of employment and rural exodus). This is also the case of the automotive industry, which massively reduces its labour force - while increasing its production capacity and whose word has become law in terms of modes of transport, town and regional planning and urban development. An alternative socio-economic logic would make it possible to develop a means of production that is less predatory of nature and our way of life, while creating more jobs.

4. The struggle for land

This is one of the most essential vectors of the convergence between social and ecological movements on the international scale. It is no accident that the most radical farm movements from a social viewpoint are also those with the most advanced environmental consciousness. They are up against polluting agribusiness, with its GMOs, its fertilisers and pesticides poisoning the environment; they take a stand against capitalist agriculture that destroys soil and forests. In the countries of the South, this struggle is inseparable from the struggle for radical land reform, against the latifundistas' monopoly over land ownership, and for land redistribution. But the struggle for an alternative agriculture, respectful of the environment and based on small farmers' work, co-operatives, rural communities or indigenous communities is a planetary challenge, concerning both the Third World and capitalist metropolises. One

of the most important forces in this battle for land is "Via Campesina", an international network of the agricultural left, made up of movements as important as the Brazilian MST or the French Confédération paysanne. These social movements promote another outlook on agricultural production, aiming to satisfy the population's social needs rather than those of the global capitalist market, and respecting peoples' right to feed themselves.

5. Eliminating the debt system

"Development through debt", got its initial impetus from financial powers in the North, and led to a system of control over debtor countries' economic policies (above all in the South) and strengthened powers for the IMF and WB (including in the North). The diktat of debt interest charges and the WTO's ultra-liberal hard-liners have dire consequences for human societies (destruction of the social-safety net, of subsistence farming), and of nature (destruction of natural resources for export purposes). This means the fundamental mechanisms of this system of domination must be fought from both the social and ecological standpoints.

The trade rules brought in by the GATT, followed by the WTO, reinforce domination by major multinationals in the North. By forcing local markets to open up to their products, these institutions have increased dependency (even in terms of food), undermined social equilibria and led to an irrational increase in international trade, which feeds the energy and ecological crisis.

6. Long term and democracy

The ecological question requires that we take very long-term consequences into account, as natural rhythms have a very different time frame from the necessarily short one of the market. Many social needs (education, health, etc.) also demand a longer timetable than the "almighty market" does to achieve their aims - and this is one of the main reasons they are public services in the real sense. Ecological consequences and human needs both require that our alternative policies take these long and very long term time frames into account. This means thinking in terms of solidarity among generations. After the defence of social needs, ecology has given a new legitimacy to the concept of planning. What is planning, if not taking long-term effects into account?

But ecology has also played a part in the development of an in-depth critique of the bureaucratic experiences of the former Eastern Bloc countries. Is this indispensable meeting between ecological, democratic and social issues and forces possible? Yes, because contemporary ecological and social crises share a common origin - in capitalism. Common causes call for common solutions.

Anti-capitalism is not a set of "negative" ideas. Indeed, it makes it possible to foresee a common ground between ecological and social struggles. It also helps to set forth shared alternatives, in a positive spirit of solidarity. It enlightens us as to causes and solutions. On the other hand, should political ecology fail to integrate/bring in a critique of capitalism, it runs the risk of adapting to the mainstream, losing its radical edge and falling back on elitist, ultimately anti-democratic solutions that are socially inegalitarian, and at once impotent and unjust. This calls for true links, not merely identifying ecology with its social impact. Ecologist thought has indeed brought in a major dimension, not found as such in social thought - an analysis of the relation between human societies and nature. This is its original contribution and its specific terrain. So we can say that we must neither prune back the ecology question to the social terrain alone nor ignore social antagonisms in the name of planetary ecological imperatives.