Introduction

Women, Ecology and Health: Rebuilding Connections

It is now twenty years since the 'environment' was put on the agenda of international concern with the Stockholm Environment Conference in 1972. The United Nations Conference on Environment and Development (UNCED) held in Rio dc Janeiro in June 1992 marked the culmination of these two decades of environmentalism, enabling us to take stock of trends. to build on the most promising and lasting ones.

The global concern for planetary survival has moved from issue to issue in the last two decades. From desertification it shifted to acid rain, and the current preoccupation is the pollution of the atmospheric commons, symptomatised by the greenhouse effect and ozone depletion. The official environmental response has largely been one of offering technological and managerial fixes which, rather than addressing or solving the basic ecological problems, often create new ones. The search for technological fixes to the greenhouse crisis is an example of a cure which could be worse than the disease, destabilising the planet's life support systems and livelihoods in the Third World.

There is another response to the growing ecological crisis which comes from women engaged in the struggle for survival; because of their location on the fringes, and their role in producing sustenance, women from Third World societies are often able to offer ecological insights that are deeper and richer than the technocratic recipes of international experts or the responses of men in their own societies. There are two reasons for this.

Firstly, these responses come from cultures in which maintenance of life has been the civilising force; secondly, the gender division of labour, introduced or aggravated by the development process, has increasingly pushed women to work for the production of sustenance, while men have been drawn into military and profit-seeking activities.

In the post-UNCED era of 'global environmentalism', the two distinct processes outlined above continue to be at work for the identification of environmental problems and their solutions. In the dominant process, men in centres of economic and political power see the roots of the problem and the burden of solutions as lying outside themselves and their context. They begin with prescriptions for change in other places and by other people, often people and places that have been victims of the environmental consequences of decisions made in those very centres of power. Thus, the UN Conference on Environment and Development had a tendency to identify the South as the source of all environmental problems and the North, with its technology and capital, as the source of all environmental solutions.

The contributions in this volume illustrate a different process, one which relocates the problem and begins with people's own lives. It connects global environmental issues with how people are affected, on a daily basis, in diverse local situations.

Earth body, human body: the continuity

The 'environment' in these papers is not an external, distant category: in Penny Newman's words, 'The "environment" for women in our communities is the place we live in and that means everything that affects our lives.'

Women's involvement in the environmental movement has started with their lives and with the severe threat to the health of their families. From the perspective of women, environmental issues are quite directly, and clearly, issues of survival. Ann Usher in her discussion on deforestation and AIDS explains, 'The Thai community forestry movement that emerged in the mid-1980s is not just a fight for rights over the forest. It is a fight for survival', a point Penny Newman makes in the context of toxic hazards.

Survival becomes the juncture connecting different movements and women in different locations. For women, health issues and environmental issues are related, as demonstrated most clearly in the first three contributions. Ann Usher shows how metaphorically and materially 'the condition of the human immune system weakened by AIDS shares many similarities with a degraded ecosystem like a dying forest.... Not only is the degraded forest unable to "perform" the functions that were once part of its nature, it becomes increasingly sensitive to unusual pressure from the outside.... Stresses that were once absorbed by the ecosystem without inflicting significant damage now cause devastation.'

Penny Newman shows the links between health problems and the pervasiveness of chemicals in our production systems. She also points out how white. male-dominated environmental organisations fail to see the interconnection between various issues—ozone depletion, acid rain, toxic wastes, pesticides—and to understand that they are actually one issue, the massive production of man-made chemicals by the petrochemical industry.

Mira Shiva further elaborates how health issues and environmental issues are one and the same. She demarcates diseases as arising from two conditions—deprivation of essentials or an excess of non-essentials; ecological erosion leads to the former, pollution to the latter. She further points out that no amount of drugs and doctors can create health if essentials are

becoming more scarce due to ecological erosion, and non-essentials more pervasive due to consumerist life-styles, environmental pollution and the accumulation of waste.

Environmental problems become health problems because there is a continuity between the earth body and the human body through the processes that maintain life. This continuity also implies that the challenge of the reproduction of nature and the challenge of the reproduction of society need to be addressed systemically. Reducing the problem of the reproduction of society, in the face of declining resources and declining access to resources, to a 'population problem' is another symptom of the tendency to treat people of other cultures, races and places not as human beings but as statistics to be manipulated. But behind the numbers being manipulated are real women with human rights and health needs. As Mira Shiva reports in her contribution:

For those involved in health work, population control policies have been a double tragedy, first because they failed to meet women's contraceptive needs and second because they eclipsed other necessary health care work.... Had those whose hearts bleed for the soaring population of India cared to listen, they would have recognised the needs to strengthen the hands of women early enough, educationally, economically and socially, so that they could be helped to make choices about conception and contraception.

An almost logical, and dangerous, extension of this is the subject of the contribution of the Forum Against Sex Determination and Sex Pre-selection (FASDSP): technologies that determine genetic characteristics in unborn foetuses. It addresses the political and ethical implications of the manipulation of women's bodies, either through invasive technologies or more subtly, to suit the gender bias of society. The patriarchal analogy of woman and nature is subverted through the women-ecology-health connections made in this volume, thus relocating the terms of the discourse through a redefinition of the human body, the earth body and the body politic.

People, their environment and their society are not separable by rigid and insular boundaries. The boundaries between them are porous and flexible, allowing interchange and influence. The unity here is not the uniformity of the fragmented atomism of Descartes and Hobbes. It rests on the continuity of life in its interconnectedness, there are subtle and complex connections between diseases of the human body, the decay of ecosystems and the breakdown of civil society, just as there are connections in the search for health at all these levels.

As the 20th century closes, feminism is faced with two challenges: on the one hand there is the challenge posed by ecological disruption which threatens the very basis of life on this planet; on the other, there is a constant need to respond to, and transform, the patriarchal categories of definition and analysis that we have inherited.

The ecological challenge compels us to recognise connections and continuity within an organic, evolving, dynamic nature. A feminist response that is ecological must necessarily reactivate a conscious awareness of, and dialogue with, nature, lifting it out of its patriarchal definition as something passive and inert—a definition that has also been extended to women.

This separation between the natural and the human world was constructed simultaneously with the separation of mind from matter, and intellect from body. The exclusion of nature from culture and body from mind were used to essentialise gender in such a way that women were treated like nature, devoid of mind and thought, while men were constructed as distinct from the physical world, guided by reason alone and capable of complete intellectual transcendence of the body. How should we respond to these social constructions? The authors in this volume transcend the nature/culture dichotomy by recognising that the passivity and inertia of nature are a patriarchal construct and that the interconnectedness of women and nature can be one of creativity, life and intelligence. And, significantly, of resistance. This politics, based on nature taken as both female and intelligent, does not see liberation in severing the link between woman and nature, but in recognising the necessary connection and continuity between the human and the natural. It does not locate intelligence in the machine or artefact; rather, the ecological perspective acknowledges that some machines and artefacts in fact initiate disruption and imbalance. Chemical fertilisers were treated as total substitutes for, and an improvement of, the earth's fertility. Their use has led to soil, water and atmospheric pollution, and unhealthy plant growth, vulnerable to pests and diseases. An ecological perspective, therefore, emphasises the need to distinguish between artefacts, machines and other technological products on the basis of whether they interfere constructively or destructively with nature. It also raises fundamental questions about the political and social role of technology, by rejecting patriarchy's nature/culture dualism.

Separatism and the disintegration of the

Separatism is patriarchy's favoured way of thought and action. There are many levels at which false separation creates conditions for ecological and social disruption and the marginalisation of women from the body politic.

A neutral separatist boundary that women everywhere are challenging is between production and reproduction. This in turn derives from the basic dualism of nature/culture that characterises patriarchal paradigms, which exclude ecological contributions to the production of economic value. The externalisation of women's work and nature's work from dominant economic thought has allowed women's and nature's contributions to be used but not recognised. Nature's work is what ecological perceptions allow us to see.

'Nature' in this volume is also socially, culturally and politically constructed. Not only is it not outside economics and production, it is the basis of economic production. As Ann Usher and Vandana Shiva show in different ways, the 'virgin' view of nature necessarily goes hand in hand with the 'whore' view of what is not virgin nature. However, nature is neither 'virgin' nor 'whore', and ecology is not just conservation. Production happens in nature, in the home, in our daily lives, and is not limited by the artificial production and creation boundaries of patriarchal economics and scienc. The separation between production and reproduction, between innovation and regeneration, has been institutionalised to deny women and nature a productive role in the economic calculus. As all the contributors show, conservation must happen in the factory and in the city if total destruction is to be avoided. All the authors implicitly or explicitly question what is meant by 'production'. Gail Omvedt and Teresita Oliveros give accounts from India and the Philippines of how capitalist agriculture and industrial development have affected farmers, especially women farmers, and how they are engaged in struggles that simultaneously protect nature and their needs.

Gail Omvedt analyses the experience of peasant movements in the State of Maharastra in India, and shows how they are bringing issues of the reproduction of nature into agricultural production, thus changing the assumption about productivity and producers. The drought eradication campaign of the Mukti Sangharsh movement makes visible the environmental costs of sugarcane cultivation, and has led to the search for production systems which do not degrade land and water resources. This ecological perspective is also making women central to the search for sustainability, as captured in the slogan 'hirvi dharti, stri shakti, manav mukti' (green earth, women's power, human liberation), and in the experiments with *sita sheti*, small-scale, low-input agriculture production, mainly for consumption in the household.

Loreta Ayupan and Teresita Oliveros describe peasant women's direct action to resist their displacement by an industrial development project cover-

ing five provinces adjacent to Metro Manila. In a gesture of symbolic irony women in barrio Tartaria drove away surveyors who had come to survey land for a slaughterhouse and cemetery for the industrial zone: in the face of the expansion of this culture of death, peasant women in the Philippines 'are struggling to sustain and defend life by sacrificing their own'. For them, 'the survival of their families and communities is synonymous with the survival and preservation of the environment'.

The contributors also examine the notion of 'rights'. The concept of rights that derives from a fragmented view of nature is a notion that fails to protect either people's health or the health of ecosystems. Vandana Shiva points out how a system of rights derived from separation creates and protects property; Indira Jaising shows how existing jurisprudence is built around the protection of property, not the protection of life, and tells us how this jurisprudence militated against the delivery of justice to the victims of the Union Carbide disaster in Bhopal. She indicates that it is necessary to evolve a rights jurisprudence that protects people, their health, and ecosystems, while Vandana Shiva elaborates how notions of rights for the protection of property contradict rights to the protection of life, both in the case of human reproduction and of plant reproduction. Intellectual Property Rights (IPRs) are the ultimate Cartesian construct of a mind/body, culture/nature dualism, and perpetuate the evolution of ethics and law in the anti-ecological direction of 'separatist' rights to property which threaten farmers and women worldwide.

'Separatist' rights as embodied in IPRs, and in the negotiations at the General Agreement on Tariffs and Trade (GATT), have been identified as patriarchal projects by women activists of the South, rather than by feminist theorists of the North, indicating that our conventional notions of the separation of theory and action and of the primacy of the former need revision.

'Separatism' seems to be emerging as the contemporary expression of threatened patriarchal power, linked intimately to the global patriarchal project of forced integration into so called 'free markets'. 'Separatism' is appearing as a virus, infecting the body politic subjected to the rapid 'opening up' to global forces. Ethnic conflict, xenophobia, fundamentalism, and the rise of narrow nationalism are tearing apart the social fabric just as ecological destruction is tearing apart the web of life in nature. Integration as understood by global capitalist patriarchy is leading to disintegration because it is generating economic, social and cultural insecurities faster than people can identify the roots of these insecurities. Feeling the besieged 'other' in the global playing field of the market, and not being able to ident-

ify that field, members of diverse communities turn against each other, identifying their neighbours as the 'other' that poses a threat to their well-being and survival

Since diversity characterises nature and society, the attempt to homogenise nature creates social and cultural dislocations, and the homogenisation of nature also becomes linked with the homogenisation of society. Ethnic and communal conflicts, which are, in part, a response to cultural homogenisation, are further aggravated by the process of development which dispossesses people, denies them control over resources and degrades ecosystems.

Rita Sebastian chronicles the devastation of Sri Lanka by the ethnic conflict which has been inflamed in recent years by rapid integration into world markets through free trade zones, and gigantic projects such as Mahaweli to supply power to the export industry.

The accelerated Mahaweli development programme in Sri Lanka is an example of development policies that ignore both human and environmental factors and a long-term perspective. Building dams across Sri Lanka's longest river, the programme deforested and changed the contours of vast areas of land, at the same time displacing thousands of families, largely peasants. These peasants were then resettled in parts of the northcentral and eastern provinces. The resettlement policy led to a dramatic change in demographic patterns of the eastern province in particular, altering a previously balanced ethnic composition in favour of the majority Sinhalese community and thereby increasing ethnic tensions.

It would be wrong to assume that 'separatist' views only infect the body politic in the South. Yugoslavia is an indication that this is a global phenomenon.

We see the spread of violence as the culmination of patriarchal projects in which the potential for death and destruction is far greater than for the sustenance and reproduction of life. Superficial ideas of what development should be have led to the rise of fundamentalism, terrorism and communalism*, which further threaten life and peace. The feminist response to violence against women, against nature and against people in general attempts to make the production and sustenance of life the organising principle of society and economic activity. Whether it is the technological ter-

^{*} In the Indian subcontinent, communalism refers in particular to social and political relations between the majority Hindu community and Muslim, Sikh and other minorities.

rorism of Union Carbide in Bhopal, or the terrorism of racism, fundamentalism and communalism in Europe, Pakistan, India and Sri Lanka, we see a culture of violence and death extinguishing a culture in which life is generated, protected and renewed. It is in reclaiming life and recovering its sanctity that women of our region search for their liberation and the liberation of their societies.

Rebuilding connections

A common criticism levelled at ecological feminist approaches to the current crisis, is that of 'essentialism'; relating environmental issues to women in a specific way is seen as an 'essentialist' world view. Yet the charge itself emanates from a paradigm that splits part from whole, fragments and divides, and either sees the part as subjugating the whole (reductionism) or the whole as subjugating the parts—in other words, essentialising both.

There are, however, other paradigms in which the whole and the part carry each other—the part is not separate from the whole, but its embodiment, in flux, in dynamism, in change. Quantum theory is probably the best illustration of how parts embody wholes, because quantum subsystems which have been part of a system do not behave as individual, unconnected fragments on separation, but have connected histories in spite of separation. The famous Einstein-Podolsky-Rosen paradox raises major philosophical issues related to this non-reductionist, non-hierarchical relationship between parts and wholes. The whole is not external to the part in all paradigms of 'nature' and 'society'. This is what David Bohm is pointing to through his concept of enfoldment and the implicit order in which the whole is enfolded in the part and unfolds through it.

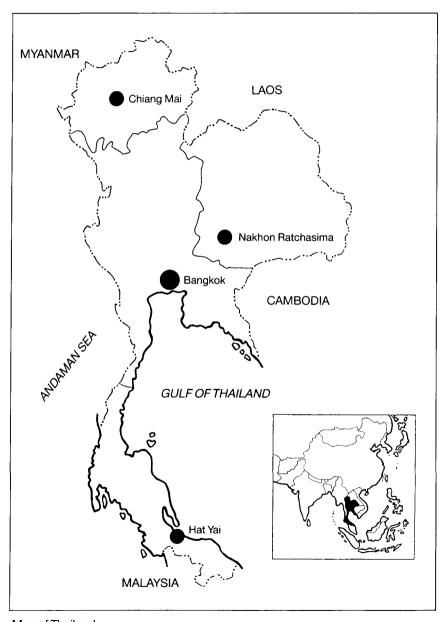
A second aspect of the charge of essentialism is that it comes from a view that treats nature as inert and passive, and without intrinsic value. By failing to recognise nature's diversity, its regenerative capacity and its production of life, this view essentialises all production into human or technological intervention.

Another charge of essentialism comes from those who see difference as so 'essential' that it makes solidarity and commonality impossible. This again is based on the patriarchal paradigm of 'sameness'; if people, things, organisms are different, then the assumption is that they can have no relationship and no overlap. This leads to a solipsism that interprets relating and connecting as sameness and the argument that the search for common ground for women's actions and concerns is essentialising the category 'woman'. There is, however, no essentialism involved in partnerships, in

solidarity, in symbiosis. Women acting together in spite of their diversity, is not equivalent to the essentialising of woman as a uniform category. Yet another common criticism of reconnecting with nature is that it involves a return to the past. This criticism arises from externalising nature in space and time; connections then imply a 'return' to another time, another place. If, however, our perceptions are ecological, then nature is the complex web of processes and relationships that provide the conditions for life. In this view, nature is not external, and it is not spatially and temporally separated from our being. Essential ecological processes that maintain life cannot be treated as part of the world-view of technological obsolescence. The moment we accept conditions for life as obsolete aspects of a primitive past, we invite death and destruction. In fact, it is this chrono-colonisation, or temporal colonisation, of living processes based on false and artificial constructions of 'traditional', 'modern', 'post-modern', as if they are in a linear temporal hierarchy of the past, the present and the future, which underlie the subjugation of nature and women. This colonisation of life cycles and time separates production from reproduction, as Vandana Shiva analyses in her paper on 'The Seed and the Earth'. The separation of the conditions of life from ourselves and our economic and scientific activity, and the location of these conditions in the past, are a major cause of the ecological destruction of ecosystems and of our bodies.

Through these contributions we attempt to reconstitute both 'woman' and 'nature', and to show that nature as the ecological web of life is not out there in space and time: it is us.

Across the world, women are rebuilding connections with nature, and renewing the insight that what we do to nature, we do to ourselves. There is no insular divide between the environment and our bodies. Environmental hazards are also health hazards, as was so brutally revealed in Bhopal and at Love Canal. Environmental hazards are also health hazards in food systems. Pesticides do not merely pollute fields, they end up polluting our bodies. Destruction of biodiversity does not merely impoverish nature, it impoverishes tribal and peasant societies. These links exist in the real world even though they have been denied by fragmented and divided worldviews. Beginning with women's experiences, analysis and actions we will rebuild the connections between ecology and health, for a more holistic approach to the contemporary crisis of survival.



Map of Thailand