

## ENVIRONMENTAL SUSTAINABILITY:

### Rights To Life, Development and Survival

By Reginald Herbold Green

Not only is attacking poverty a moral imperative, but it is also essential for environmental stewardship.

- World Bank (World Development Report 1992)

#### I.

##### What Are We Talking About?

Environment and ecology are often used as synonymous terms. This is less than helpful if taken to mean that only material conditions and especially those relating to nature are relevant to the environment and to environmental protection.

Livelihoods (or their absence) are an integral part of the human environment. They are an equally integral to the right to development. Ecological policy and practice which ignores them is normatively problematic. In addition, it is usually unsustainable (especially by accountable governments) unless the livelihoods negatively affected are those of small, socially and politically marginal communities.

The reconciliation of the right to development and to livelihood with the ecological right to survival turns on sustainability. Livelihoods and development which are unsustainable are inherently unsatisfactory. Sustainable livelihoods and development including ecological management and protection does not eliminate conflicts of rights nor the need for trade-offs and compromises. It does offer a perspective within which dialogue and reconciliation more potentially attainable.

"Whose rights to what?" needs posing. Four different answer clusters emerge: the rich North, poor Southern countries, poor Southern households and persons/groups with focussed general or specific ecological

commitments. In principle, a fifth perspective - poor Northern households - should be important. In practice, it is rarely clearly articulated beyond specific cases (e.g. loggers threatened by owl protection).

In the rich Northern perspective global ecological damage threatens both future Northern growth and maintenance of achieved levels of income and amenity and, therefore, must be halted or reversed. It sees this as technically feasible at substantial, but bearable, cost in the North and calls on (demands?) the South to carry out a similar exercise out of its own resources.

The North's basic interpretation of the global obligation to achieve ecological stability/recovery is one of each country being primarily responsible for all aspects in its own territory with enforcement (tariffs? import bans?) against backsliders. It does - via free trade - propose to supply ecologically sound technology to the South, via enterprises and at a profit and to undertake relevant research - again primarily via enterprises charged for in patented/intellectual property protected legal monopoly/oligopoly product prices. On a grace and favour basis some joint financing of costs in Southern territory protection is recognised as desirable.

The economic logic of this approach is not impeccable. External economies (diseconomies) the "beneficiary pays" ("polluter pays") principles do not necessarily give territorially bounded results. Further, "ability to pay" and "avoidance of regressive taxation" are not principles unknown to economics but appear to be almost totally left out of the Northern stance.

The poor Southern country perspective has three strands. The first is a root and branch cutting down of the Northern case; the second a defence of its own commitment to sustainability; the third a demand for cost sharing on a progressive taxation basis. The first basic contention is that most past ecological damage and most present risks caused by Northern actions (e.g. present comparative CO<sup>2</sup> emissions and forest absorptions per capita). Linked is the argument that these practices were in large part necessary to achieve development and that to forbid them to the South is to forbid Southern development. Like its notorious predecessor, the Club of Rome's "Limits to Growth" exercise, the North's Rio stance is seen as a "what we have we hold" and "the devil take the hindmost" approach seeking to freeze global hierarchies and inequalities.

The second is an assertion that Southern governments are committed to environmental protection, even if their priorities are not identical to Northern, but are also committed to national sovereignty in identifying, articulating and implementing. The implication - sometimes spelled out - is that Northern ecologists do not understand Southern environmental problems, priorities or policies adequately and they and Northern governments are behaving in an unacceptably neo-colonialist mode.

The third is to argue for a common global environmental strategy (including Southern priorities) to be financed on a cost sharing basis with charges proportional to output per capita and with parallel territorial programmes funded on the basis of need. This might or might not be a way forward except that the Southern definition of environment tends to embrace the whole global economic environment.

Clearly there are links. For example, one cause of ecologically unsound resource exploitation is debt servicing. Therefore, debt relief (whether broadly linked to national environmental policy or to an agreed project package) is discussable. Equally, human poverty leads to the creation of ecological poverty so soil conservation/agro forestry/anti-desertification packages can reasonably be financed as ecology protecting. But putting the whole array of poverty reduction (much less national product per capita disparity reduction) under the ecology rubric appears unlikely to be functional.

The Southern poor household position is by no means necessarily the same as that of Southern governments, especially of relatively unaccountable ones responsive to narrow domestic and Northern constituencies, influencers, paymasters. Perceptions alter priorities and nowhere in this more true than in respect to livelihoods of poor households.

Clearly any Southern poor household 'position' is largely an artificial construct. Poor household groupings are usually locally and conceptually limited although some national alliances backed by domestic NGO support groups with professional expertise are emerging (e.g. India, Philippines, Malaysia). Globally, all of their organisational (as opposed to individual) spokespersons are voices for, not of, the globally voiceless and only on land and the overlapping indigenous minority rights issues have these voices tended to focus on items on the ecological agenda.

Poor households do care about environment including ecology. The first cluster of concerns turns on livelihood sustainability and the second on access to water, fuel and - at least in densely populated areas - sanitation. Perceptions of what is ecologically damaging may be 'unscientific' (if that is a fair description of observation based on reflection on perceived experience) and narrowly bounded both contextually and technologically. They are, however, genuine and often acute.

Poor households in general would not deny - and can identify - practices conducive to environmental degradation and practices not (or no longer) carried out which would reduce environmental damage and future livelihood risk. The basic reason for the apparent contradiction between perception and practice is need. This perception is not anti-ecological but rather ranks survival and a modest sufficiency as the top household environmental priorities. If the means to behave in an eco-friendly manner reducing livelihood risks consistent with achieving household incomes above a social poverty line are made available most such households will respond. How, is a complex, contextual problem. For example, many such households are well disposed to tree planting - as windbreaks, for fuel and building materials, for household fuel and fodder, for cash income - but few welcome large mono-tree stands tailored to urban fuel or hillside/watershed conservation needs and designed without reference to their livelihood requirements.

Gender aspects of environmental protection certainly do exist. Because providing water and fuel are usually among women's responsibilities in poor Southern rural households, degradation of tree and bush cover and related sinking of the water table have a disproportionately negative impact on their workload. Their responsibility for providing food means that soil degradation and erosion increase total burdens on their time.

Most women - like most rural people - are aware of the poverty links of ecological damage and do seek to prevent ecological looting by outsiders - including commercial - forestry endangering food and fuel supply, e.g. in Indian and Philippine "tribal" areas. On the other hand, in the context of present poverty and narrow survival margins women - like men - necessarily choose to put present survival first sometimes with devastating ecological results from loss of trees and bushes or soil or both.

These contextual issues are hard to build into a conceptual framework albeit a check-list of ecological protection/degradation costs/benefits for

men, boys, women and girls could be constructed in most countries. What one now has conceptually is a rather different and rather peculiar contention that women in general care about ecology and its protection and that men in general do not because women are carers, nurturers, protectors and men profiteers, exploiters, users. This transformation of "children, kitchen, church" into a positive eco-friendly stereotype is of dubious desirability as a means to empowering women or reducing gender typing. Operationally it starts at the wrong end by not identifying what costs/risks particular women in particular contexts perceive; how they believe they could reduce them and what they see as the requirements (time? money? tools? knowledge?) to do so.

The eco-committed perception focuses on damage and risk on reduction. Like any single issue focus, it treats other goals as inherently subordinate - though not necessarily invalid or beyond discussion/negotiation. That is not an inherent objection. If a set of goals and programmes are valid it is desirable that some people and organisations give them a dynamic and cutting edge by focussing on forwarding them. It becomes unhelpful only when somewhat extreme (even by general ecological movement standards) positions (e.g. viewing tse tse flies as acceptable fauna defenders), totally inadequate objective comprehension (e.g. viewing co-existence of crocodiles and children in the same body of water as practicable) or impervious to other valid goals' claims (e.g. land for food as opposed to forests) hamper negotiating attainable trade-offs and/or infuriate persons, institutions and countries with other priorities.

A more basic problem relates to risk, cost and temporal urgency evaluation. On most issues the direction of negative change is demonstrable. The speed and severity is, on known data, much more problematic. So are evaluations of costs, degree of positive results, timetables, side effects and sometimes even directions of results of proposed changes. The ecologically committed tend to underplay uncertainty and pose catastrophic, immediate risk scenarios.

Overcertainty/oversimplification of presentation against well briefed opponents can lead to loss of credibility rather than agreed initial steps. Global warming counter-measures are such that while an early start is needed a 'big bang' one is less evidently essential (or attainable). Generally it is arguable fear of the consequences of catastrophic risk will

not mobilise support as well as less apocalyptic, more pragmatic arguments (e.g. species diversity protection to yield gene and product banks and tourism bases).

The basic issues in each case except perhaps the ecological are power, possession and profit. Poor household concerns are to earn a livelihood, to have possession of the means to do so (including secure access to usable land) and to profit from - inter alia - ecological protection. The Northern and Southern governmental cases are even easier to translate into p-p-p terms. The ecological stance is about power over what is done and possession of the agenda albeit the profit is not material.

That summary is neither denigration nor an epitaph on the possibility for action. To possess the means and to have the power to profit from efforts to earn a reasonable livelihood whether as a household, an enterprise or a country is not merely understandable, it is also laudable so long as neither self destructive nor based on impoverishing others.

The present form of presenting perceptions and cases does not appear to be particularly well suited to a non-perjorative examination of power-principle-possession aimed to seeing how sustainability and livelihood (survival/right to development) can be furthered jointly. One clear substantive problem area is that of technology to limit emissions damaging to the ozone layer and/or contributing to global warming. If existing technology is not put into global use and more developed the outlook for both ozone and temperature is bleak. But the technology is costly in two senses. The first is initial purchase. Enterprises which have invested in developing it will - not unreasonably - wish to recover their investment and a profit. Cash down purchases at resulting prices may well be beyond Southern capacity. Here the parameters of soft loans and regulated prices (a normal profit - while hard to define precisely - is one thing; a monopoly price entrenched by international intellectual property right enforcement is something else) might yield results.

The more serious problem is that of overall capital, operating and unit output costs. If these mean Southern industrialisation would - in general - be non-competitive domestically and on export markets, means toward an acceptable (to the global environment and to the South) way ahead are much harder to find. What is needed now is more case by case work on how much environmentally friendly technologies would (or would not) raise the costs

of which products and the extent to which this would put the South (or rather specific countries in the South) at a significant disadvantage. That research is an urgent priority - until more, more objective data is to hand serious negotiation, let alone action, will be delayed while fluorocarbon and net carbon dioxide emissions continue.

A parallel problem area is institutional. The Rio Conference was not a possible negotiating forum, even on principles. The Montreal Convention (relating to ozone layer protection) is the product of a workable process using specialist and official input to lay the ground for a final compromise plus formal unveiling political session. If the commitment exists an analogous CO<sup>2</sup> Convention could be envisaged (with emission control and absorption enhancement provisions).

However, if Southern states (especially the handful likely to have emissions seriously affecting the ozone layer or having a substantial impact on global warming) are to be added to the Montreal, or included in the CO<sup>2</sup>, Convention work needs to begin now. If the principle of cost sharing is agreed then a series of expert studies leading to early official level explorations toward parameters of expected contributions and rough allocation of transfers (as done in IDA) would be possible. If that could be ratified at political level, then how to would - however messy, difficult and repeatedly threatened with breakdown - be feasible.

## II.

### Right To Development: Right To Survival

The right to development is not a codified or convention specified right with a legal text. However, several strands have become identifiable in the main body of discourse:

- concern with the right to a decent livelihood for households and peoples as well as acceptable levels and growth paths of national and territorial output;
- including participation, access and accountability (empowerment) aspects of the human condition as well as the more narrowly material;
- provision of universal access to basic services (or basic social and human investments to use an alternative formulation) both from quality of life and quality of productivity/livelihood concerns;

- highlighting empowerment as the main route out of absolute poverty but recognising the need for "safety nets" (as of right) to meet the needs of unempowerable persons or households;
- acceptance that the right to development - like development, however defined, can only be met over time measured in decades and, in any case, is an ongoing, processual right whose specific content will vary (develop) over time.

Nothing in that set of strands is inconsistent with "The Right To Survival". Development as processual and attaining an acceptable approximation to it requiring decades implies a sustainability requirement. A right to development for one generation in terms condemning its posterity to the reverse would be a contradiction in terms.

The right to survival is even less codified or the beneficiary of a process of dialogue. Discourse has tended to begin from ecological threats to survival and to emphasise (or at least demand) immediate technological answers with relatively less attention to process, codification or institutionalisation. That alarm ringing approach now needs to be transformed into a more sober, bureaucratic, institutionalised one. One facet of this is clearly negotiations. Another may be building up a body of rights which even if not directly legally enforceable - especially globally - do have a value in the creation of a body of opinion and of expectations conducive to successful negotiation leading to implementation including:

- prevention of global emission levels leading to ecological transformations which were substantially life or livelihood threatening;
- similar provisions in respect to regional (e.g. acid rain) national (e.g. neo-desertification) and local (e.g. water pollution) ecological disintegration menaces;
- effective access to technologies necessary or conducive to preventing/reversing environmental/ecological deterioration;
- protection of species diversity with managed access and sharing of benefits resulting from that access;
- shared responsibility for achieving results and for meeting costs on a basis related to prospective benefits and per capita resources as well as physical location of requisite action.

In principle - and in practice over a 50 years perspective - these strands are complementary to (in some cases essential for) those of the right to



development. The areas of conflict are short term and equitable divisions of costs/benefits.

The household level short term conflicts turn on: poverty, calamity, exclusion.

The poverty conflict is illustrated by many land and labour time poor rural households. To live now they must use land intensively in ways leading to erosion and/or loss of fertility, collect woodfuel in ways contributing to loss of tree/bush cover, curtail erosion avoidance and tree planting in order to devote time to immediate payoff activities. Sustainability to them necessarily begins with being alive today in order to have a tomorrow, even if today's actions erode tomorrow's probable livelihood and certainly that of present children as well as unborn descendants.

Calamity impact is illustrated by drought which aggravates the poverty position already noted and adds new problems:

- concentration of populations (human and animal) leading to spot environmental degradation which often spreads cancerously;
- failure to restore damage or to reduce future vulnerability before resuming 'normal' use.

Exclusion as a result of measures intended to provide ecological protection has affected indigenous minority residents of wildlife protection areas, hill peasants and forest clearing cultivators. In a number of cases, the ecological gains have not been self-evident (e.g. hunter gatherers in African forest zone reserves) nor the motivation above doubt (e.g. Philippine approval of EEC backed plantation projects on steep slopes on which the indigenous Cordilleran peoples are forbidden to farm). However, in others there is little doubt either that existing poor household land use was ecological damaging or that the exclusion of those poor households was environmentally devastating for them.

Resolution of this conflict can proceed on two lines: preferably enabling existing users to practice sustainable activities through altered make-up of activities and/or technique changes; or - if the former is impossible - providing adequate, acceptable alternative livelihood access (usually involving land for rural households).

The same issues arise in rather different forms at national level. Poverty can force maximum resource exploitation to earn foreign exchange to cover import requirements or to service debt. Equally, it can be seen to require using low capital cost technology even if this also means low eco-friendliness. Exclusion is even more central nationally if it means not harvesting forests nor industrialising using low cost (whether environmentally friendly or not) techniques.

Equitable division of costs and benefits is in principle easy to agree. A functional comprehensive costing and charging formula, however, is quite impossible to agree at political level. The question is what can be negotiated product by product, technique by technique, country by country. This is messy, tedious and at best approximately correct but there is no better option available. At least six points are relevant:

- most (not all) present ecological damage at global level results from the historic and continuing activities of present rich counties at home and abroad.
- if present industrialising countries 'advance' to 1990 OECD output per capita levels using 1950-70 OECD technology, ecological collapse is inevitable.
- politically sustainable environmental agendas at national level must address domestic (e.g. air pollution, erosion) as well as global (e.g. fluorocarbon emission, deforestation) priorities.
- both external costs (from acid rain to ozone holes) and benefits (from additional carbon dioxide absorption to species diversity preservation) are common, complex and not readily quantifiable.
- early action in the right direction is needed both because of uncertainty as to how much is required and of the speed of impact.
- poor countries (and households) even if ultimately benefiting on direct discounted future gains flows calculations, may be unable to meet the initial capital costs.

That is an adequate base for potential recipients to put up reasoned project/programme proposals; for potential transferors to negotiate on content and transfer proportion and for a quasi independent expert group to put up proposals especially in respect to issues requiring global action with suggestions as to territorial distribution of action and national distribution of financing including transfer payments and receipts.

Population growth is not directly addressed here for three reasons:

- output and technology issues - not population changes - are central in respect to the two most immediate global challenges - ozone layer holing and global warming.
- an approach literally targeting reduced population growth as an environmental protection instrument would raise serious normative and political problems as well as maximising North-South conflict.
- in respect to both the rural ecological and the poor household livelihood issues within the right to sustainable development, the causal direction is primarily from poverty to population growth and certain types of ecological damage - particularly to trees and shrubs, hillsides and land fertility more generally.

Therefore, right to livelihood implementation by, and in support of, poor rural households, including universal access to basic services, is the most important road to reduced ecological damage from enhanced household/land ratios (population growth). Certainly it needs complementary eco-friendly technique and family planning programme access, but without the right to development focus neither will usually prove particularly effective.

#### Transforming Conservation into Sustainable Development

Conservation and preservation carry overtones of freezing (or reversing) uses. Sustainable development implies the acceptance (or requirement) of use changes so long as they do not lead to irreversible ecological or human environmental degradation. In some cases sustainability does require preservation - e.g. wilderness areas to protect bio-diversity. In others - e.g. harvesting fish or trees in a context allowing or providing for regeneration - sustainability is compatible with enhanced use. Therefore, sustainable development would appear both the more general goal and the one to which the broadest coalitions of supporters can be rallied. If this is to be achieved, several issues have to be tackled on a case by case, contextual basis. Each is contentious but usually in terms of trade-offs and compromises which allow for reasoned dialogue, agreed compromise and sustainable progress which posing narrow either or positions and engaging in a diatribe of the deaf do not.

The first main question is how much of what kind of change is acceptable where and under which conditions. In respect of some fragile environments virtually none. In other cases - e.g. - use of fluorocarbons - change is needed precisely because present use levels are incompatible with environmental sustainability. But in many cases more intensive and

different use is sustainable and seeking to block it environmentally (and probably more narrowly ecologically) damaging.

The second basic question is Who pays? When? How? A major issue here is technology transfer to make non-ecologically/environmentally damaging urban and industrial development in the South both practicable and cost efficient. Here the bottom line is not so much normative as that if Southern industrialising countries in fact halt/reverse use of fluorocarbons and release of combustion pollutants then they will need technological access at low cost to ways and means of doing so without seriously impeding production growth or rendering it significantly higher cost.

The Southern case for substantial payments or subsidised transfers has not been helped by attempts to use the environment as a beast of burden on which to load all transfer payment needs, hopes and desires - as exemplified in the South Commission's environmental paper. Fairly clearly not all aspects of sustainable development can in practice be financed under a globally agreed environmental rubric. A systematic examination of types of transfers and of individual cases would seem likely to be more fruitful if the richer third of the world is willing to pay a share of global/national environmental priority agenda cost equivalent to its share of global income (and arguably global benefits from implementation). If it is not willing then the global agenda will simply not be achieved whatever the rhetoric on any side.

Who benefits? may appear to be a question with the evident answer - "almost everyone". But if when? How? When? are appended to it, the questions' answers become much less self-evident especially, but not only, in the South. For two reasons more attention should be given to articulating specific contextual answers.

- proportions of benefits are at least one component in agreement on cost sharing.
- saleability of environmental measures which entail costs requires demonstrating benefits which are immediate and concrete enough to convince those who can (and usually will) otherwise block the implementation of the environmental agenda. Unless poor people in the South see the net effects of proposed changes as positive they are likely to block them and certain not to be enthusiastic, self-driven implementers. This is not a matter of less concern about ecology and sustainability but of concern about livelihood losses (at the extreme

about survival prospects) in the absence of clearly understood, tangible countervailing gains.

### III.

#### Ecology, Economics and Structural Adjustment

Two developments in respect to ecology campaign foci over the past decade and especially the past five years are greater stress on economic considerations and especially market based "polluter pays" type articulations of goals and seeking to tie ecological soundness promotion to World Bank lending, in particular to structural adjustment. Both have some (quite possibly overestimated) potential but also problematic elements.

Environmental concerns are not wholly ecological and have community, national and regional agendas whose long term basic complementarity should not be allowed to obscure significant short run tensions and trade-offs. Iterative formulations at all three levels with a process of dialogue and trade-off to achieve consistency is probably the least unsatisfactory basic operating technique. Economics can - to a degree - illuminate present and future cost/benefits of trade-offs but it is not particularly helpful at creating or sustaining (as opposed to providing part of the content for) the bargaining process.

Macro economics and micro natural science are uneasy partners. The first deals in broad principles and monetary aggregates from which particular micro impacts are deduced. The latter starts with contextual physical data and processes and builds up propositions about more general outcomes. At present neither has a particularly impressive track record on predicting (or dating) environmental outcomes, especially in cases lacking a substantial body of historical data and context specific analysis.

Careful application of macro economic principles to specific environmental questions usually gives the answer "it all depends". This is not a useless answer, if it also specifies what it depends on because that is useful for picking out ways of studying specific cases. However, hopes for quick read out answers without detailed case by case study are misplaced.

To take an example, lower subsidies on inputs will reduce their usage. In the case of chemical fertilisers, the environmental implications almost

certainly diverge sharply between high fertiliser intensity farming in crop surplus areas (e.g. Western Europe, North America) and very low fertiliser intensity farming in food (and rural livelihood) scarce areas (e.g. African household sector agriculture). In the latter case, fertiliser related soil and water pollution is low and the practicability of sustainable intensive, permanent cultivation without higher than present chemical replacements is low. But at present and even more at 2010 household/land ratios that shift from long rotation/low input cultivation is a human environmental and an ecological necessity. Less fertiliser will frequently mean more soil degradation and more deforestation.

Natural science approaches have rather different limitations. Much available data is so context specific that its applicability is not general. To put it differently, counter intuitive outcomes are not infrequent. For example, to concentrate livestock at any one time on a small proportion of grazing land would seem intuitively to be a recipe for pasture degradation, soil erosion and - perhaps - water table sinking. In fact under a controlled, small paddock, frequent rotation system in several parts of semi-arid Southern Africa precisely the reverse results: carrying capacity is increased, secular pasture improvement set in motion, erosion controlled and - less uniformly - water table recovery enhanced. There are perfectly standard scientific reasons for this counter-intuitive result, but they require study of the specific ecology and ecological dynamics of the case, not generalisation from different micro ecological settings.

Designing market mechanisms to articulate/implement policy goals is often likely both to be more effective and lower cost than using administrative devices. Assuming agreed levels of sulphur emission from power stations can be agreed, issuing transferable emission allowance certificates together with imposing draconic penalties for over-emission may be the optimal available implementation route in Northern industrial economies. (It is one for which a standard neo-classical micro, and perhaps macro, economic case can be constructed.) The danger lies in assuming all issues can be dealt with in this way. Some - e.g. catastrophic risk (Bhopal and Chernobyl) - cannot. For others - e.g. individual vehicle emission levels - pass or fail road-worthiness tests are likely to be more functional than graduated licence fees. Markets are means not magicians and are in themselves largely eco-neutral or negative.

The World Bank's role in environmental protection has begun to develop a life of its own. Having built up an environmental cadre and put environmental audits into many project evaluations, it has provided itself with a built-in environmental lobby. However, initially the Bank began to pay attention to ecological and human environmental (largely indigenous minority rights) issues because Northern and - less frequently but vide the Philippines and India - Southern NGOs saw it as an accessible target whose funding of major projects gave it substantial environmental leverage which it was either neglecting or using in damaging ways.

That was, and is, a remarkable triumph for the environmentalists. Except for a handful of country cases in which major funders used all of their leverage, the Bank has otherwise been very much a self-accountable band of Platonic Guardians (not always in agreement with each other) very successfully resistant to outside pressure. But it is a problematic achievement if nationally grounded environmental priorities accountable to national majorities with human rights safeguards for individuals and indigenous minorities are the goals. External NGOs are even less accountable to Southern people than Southern governments. The World Bank while recognising that only "nationally owned" programmes (in any field) are sustainable, finds it remarkably hard to cooperate in their construction rather than seeking to ventriloquise them. Massive, intrusive conditionality imposed by rich funding bodies (as many NGOs are quick to recognise in other contexts) is not a way to mobilise broad, internalised Southern support, sustained strategic articulation or whole-hearted implementation. A more balanced approach of advice, technological transfer (to increase design and implementation capacity), refusal to fund the environmentally unsound and - perhaps - a special IDA window (additional to normal country 'quotas' or 'ceilings' which do in fact exist even if with considerable upward and near total downward flexibility) for financing projects directly related to environmental sustainability, vulnerability reduction and rehabilitation might generate more securely based progress, less suspicion and lower risks of serious conflict.

"Structural Adjustment and Environment" is a linking arising (particularly in Sub-Saharan Africa) from the ubiquitous nature of Structural Adjustment Programmes and their visible (or to hard line critics naked) impact on policy, practice and external resource flows. For the World Bank it is an entry point to exert leverage (and to placate its ecological critics?).

For environmentalists it is a bandwagon to climb on to gain leverage. For African negotiators it is an irritating complication that cannot be ignored.

Analytically the linkage is usually either fairly marginal or unsound. Macro economic analysis (the core of structural adjustment design) can provide a partial agenda of detailed questions but not read out answers. It assuredly has little power to identify what new programmes should be undertaken based on national ecological and environmental priorities. It can - once such an agenda is constructed from the micro up - help evaluate economic ways, means, costs and benefits, but that is very different from initiating design.

Second, conditionality in Structural Adjustment implies cutoffs of funding well beyond rejecting a particular unsound project. Do environmentalists seriously wish to halt Ghana's economic recovery through massive withdrawal of external transfers to force changes in a forestry policy they do not appear to understand and which is arguably sound in principle but grossly underfunded? If so, the term "ecolonialism" is rather more than a rhetorical epithet - colonialism almost always constructs glosses to explain why it 'really' is in the best interests of the colonised.

Actual ecological/environmental content in particular national Structural Adjustment Programmes (as opposed to large, freestanding projects) is at least in the vast majority of cases, peripheral. Arguably anti-poverty/Social Dimensions of Adjustment in some SAPs is an exception. However, it is treated purely on a human environmental level and not related to ecology in any systematic way.

Initially SAPs had no overt ecological content. Even now the number of environmental conditions in Policy Framework Papers (which can run to 50 pages and 150 conditions) is minute, mostly relating to sustainable forest use. There are environmental glosses on (deductive analyses of) some country programmes, but these appear to be very much parallel papers after, and with minor influence on, strategic formulation. The number of serious ground up SAP environmental assessment (ex ante) or audit (ex post) studies in SSA still seems to be stuck near zero. In fairness, countries are not exactly pressing for more PFP pages or conditions - except in some cases (e.g. Mozambique) on the poverty front. But some (e.g. Tanzania) have done some environmental assessments and strategy exploration of their own and



would - if additional funding for articulation and implementation had been clearly on offer - have been willing to discuss specific SAP-Environmental links.

This is not to say SAPs and PFPs do not have environmental/ecological consequences but that they are not consequences resulting from any overall strategies or coherent assessments. Ghana forestry illustrates. The Bank broadly backs Ghana's long rotation/sustainable replanting approach to closed forest management and its use of incentives to enhanced pre-export processing to raise export earnings at sustainable cutting levels. It has provided some credits which have been crucial to both and is presumably willing to evaluate further proposals.

But some forestry sector deductions from its macroeconomic market freeing policy are in fact at variance with implementation of the two pronged strategy. The Bank has proposed shorter duration logging concessions with no right either of first refusal or meeting highest offer at subsequent tender for new/extended concessions. Shorter concessions create incentives for less selective logging and for doing as little forest protection/replanting as possible. So does not giving a firm which has protected and replanted either an option to renew or to meet the highest bid if new tenders are called at the end of each 25 years period.

The Bank also opposes restraints on raw log exports which Ghana has used to limit wasteful cutting of certain species and to encourage sawmilling and veneer production. In practice, the Bank has accepted Ghanaian arguments but more by turning a blind eye than reaching a formal agreement on guidelines.

The conclusions available from a review of economies - ecology and structural adjustment are not new nor unique to environmental issues:

- economic analysis is a useful (but limited) servant but a tyrannical master.
- marrying natural and social scientific analyses and approaches is potentially fruitful but usually time consuming and rarely easy.
- market mechanisms (even in support of non-market goals) may be useful, low cost instruments so long as they are perceived as that and no more.
- while the World Bank should be concerned with ecological/environmental issues (especially as they relate to sustained development) it is not a plausible proxy World Environmental Adjudication Organisation.

- that structural adjustment and environmental protection are both important (albeit in rather different ways since the former is primarily about medium term means and the latter relates to long term ends) does imply mutual recognition and attempts to achieve consistency but not that the two should be amalgamated.
- using overall financial leverage to force policy changes not directly related to nor necessary for the effective use of the proposed transfers is normatively highly problematic and practically Southern animosity generating in potentially counter-productive ways.

#### IV.

##### Explorations Toward Sustainable Progress

That ecology is on major agendas is no longer in doubt. That the current combination of apocalyptic presentations, separation of human and 'natural' environmental issues, diatribes of the deaf and attempted coercive action by many parties is a sustainable way to achieve environmental protection and rehabilitation is very much in question.

Guide-lines toward a more fruitful set of dialogue and negotiations include:

1. Treating ecology as an aspect of environment embracing the human (including livelihood and quality of life) aspects as well as the natural.
2. Articulating a Right To Survival relating to global emission levels, local-national-regional environment disintegration menaces, species diversity and shared responsibility over time for rendering the right effective.
3. Relating the Right To Survival to Right To Development at local, national, regional and global levels via sustainability.
4. Accepting that livelihoods are key to survival and that, therefore, ecological protection approaches hostile to present and short run household or national livelihood concerns have little chance of sustained implementation.
5. Realisation that both priorities (which environmental threats are most urgent and damaging) and perspectives (by location and occupation) on

environmental issues vary legitimately with none having a monopoly of normative right or objective wisdom.

6. Acceptance of the fact of uncertainty as well as of that of danger in respect to most ecological threats and of the validity of social as well as natural science concerns, instruments and processes.
7. Recognition of the realities that the bulk of environmental damage has been done by rich countries whose per capita ecologically damaging actions (at home and abroad) remain dominant, but also that rapid industrialisation without environmental protection in poor countries will have massive negative consequences globally as well as nationally.
8. Resulting - given the implausibility (normatively or practicably) of halting industrialisation in the South - in a global need to make effective, affordable access to eco-friendly technology available in both South and North.
9. Moving to the construction from the bottom up of local and national environmental agendas to complement top down global and regional ones with both processes taking livelihood considerations into account.
10. Creation of sets of negotiating fora based on:
  - a. acceptance of common environmental concerns;
  - b. and the need for coordinated actions;
  - c. including cost sharing transfer payments from richer (and potentially disproportionately benefiting) to poorer countries and communities.
11. Initially proceeding in a few global fora - e.g. in respect to ozone layer rehabilitation and global warming control - and other regional or bilateral ones to achieve early forward momentum.
12. But also seeking to institutionalise the environmental protection process including evaluation of threats and instruments to meet them and monitoring in order to set guide-lines and contexts for negotiations.
13. Based on clear recognition that resource constraints are ecologically destructive (e.g. to forest and land at the level of poor households; to forest preservation and sustainable management at that of poor

countries) but that, when resources are deployed to make sustainability consistent with improved livelihood in the short as well as the longer run, a much broader participation can and does ensue yielding results which cannot be achieved simply by proscription and coercion.