

Environment and Development

Poverty, Development and Environment

Conference presentations
Enclosure to The Recommendations
of the Panel

*National Conference
6 – 7 march 2002*



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Poverty, Development and Environment – National Conference 6-7 march 2002
Conference Presentations. Enclosure to The Recommendations of the Panel

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Preface

The sixth conference about "Sustainable Development" was arranged by the Research Council of Norway/Environment and Development 6 and 7 March 2002 at Voksenaasen Conference Hotel. The topic of this conference was "Poverty, development and environment". The purpose of the conference was to focus on the research. on poverty, development and environment.

The Research Council wanted to contribute to an increased awareness of the significance of research and it's results in connection with the large international Rio+10 conference which is to be held in Johannesburg 26 August – 4 September this year (Johannesburg Summit 2002 – World Summit on sustainable development).

A conference organizing team created a set of key questions that should be answered by a conference panel. The conference presentations and the following discussions should contribute to answering these questions. In this report you will find most of the presentations from the conference.

"The recommendations of the panel" are presented in a report that was published in July 2002. To order that report please contact the Research Council of Norway.

We hope that the results from the conference should bring the actual subject up to a structured public discussion, simultaneously increasing focus on the importance of research and it's results, all tied up to "Poverty, development and environment".

Oslo, august 2002

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**Session 1: The Brundtland commissions's idea of
the relationship between poverty and
the environment – the meaning of the
term 'sustainable development'**

1. Trends in poverty research the past 10 years

I put forward five claims in my presentation, related to the linkage between poverty and the environment in the debate on sustainable development (SD). I will use examples from the area I know more about from my own research, namely tropical deforestation.

1. The main claim of SD, namely that poverty reduction also will reduce environmental destruction, was largely politically motivated. The Brundtland commission were looking for ideas which could unite rich and poor countries, and the environment and development camps.
2. The empirical foundation for this claim is surprisingly weak. Poverty leads as much, or sometimes even more, to environmental conservation than environmental destruction. This is particularly evident from the research on causes of tropical deforestation.
3. The sustainable development (poverty-environment link) provides an inappropriate and not particularly useful framework for both analysis and action to deal with poverty and environmental problems.
4. While one in the past has focussed on the link from poverty to environmental destruction, the focus should now be on the reverse link. Natural resources are critical for safety nets, subsistence uses, and cash income for hundreds of millions of poor people.
5. The future challenges in lies in how to make use of natural resources to reduce poverty. Several trends give rise to cautious optimism: decentralization and increased local control of resources (e.g., 30 % of forests owned/controlled by communities), and economic liberalization has removed controls and market barriers that excluded poor in the past from benefiting from forest resources.

The rise and fall of ideas: the case of sustainable development

Desmond McNeill, SUM (Centre for Development and the Environment), University of Oslo

The idea of sustainable development

Implicit in the idea of sustainable development is a potential conflict between human material well-being and the environment. The term "development" is concerned with increasing human well-being, while the term "sustainable" is concerned with the stress that such development may place on the environment. Has this conflict been resolved: in theory or in practice? And what has the 'idea' of sustainable development contributed in this process? These are the issues I shall address in this brief presentation.

The broader debate: a structural analysis

With the publication of the Brundtland Report «Our Common Future» (WCED 1987) there occurred, I suggest, a sort of fusion between two research and policy discourses - the development debate and the environment debate - in the *sustainable development debate*.

It is possible to analyse both the development debate and the environment debate in terms of what I call 'lines of fission': dichotomies which have been of especial significance in setting the terms of the discussion and distinguishing different positions within it¹. These are summarised in Figure 1. This is thus a simple structural analysis of the debates, in which it is further implied that the different dichotomies 'map onto' each other - at least to some extent. Thus the first column lists four 'lines of fission' which are of most relevance in defining the 'development debate'; the second column does the same for the 'environment debate', and the third combines these two columns in one, under the heading 'sustainable development debate'.

I do not have the time here to elaborate on the environment debate and the development debate, and only briefly on the sustainable development debate. The main point I would emphasise is that the combining of the first two debates has led to some interesting contradictions and realignments. For example, in terms of politics there is some confusion as to the relationship between the 'reds' and the 'greens'. They may share a negative view of the market, but their prescriptions are very different. In terms of academic discipline, we find a split of a rather different kind, between what I have called the 'hard' and the 'soft' perspectives: the former including most natural sciences (and especially physical sciences) together with economists; the latter including most social scientists. This dichotomy is common to both the environment and the development debates (although the disciplines concerned are not precisely the same in each case), and to them in combination.

¹ For a more detailed presentation of this and some of the other material in this paper, see "The Concept of Sustainable Development" in: *Global Sustainable Development in the 21st Century*, Lee, Holland and McNeill (eds.) (2000).

Development debate

north/ south
right/ left
market/state
hard/ soft

Environment debate

nature/people
global/local
market/non-market
hard/ soft

sustainable development
debate

north/ south
nature/ people
global/ local
market/civil society/state
right/ left
hard/ soft

Figure 1. Lines of fission in the environment and development debates

Consider another two dichotomies: ‘North/South’ and ‘nature/people’ which arises out of the combining of the two debates. Here, the ‘mapping’ of North/South onto nature/people is by no means a precise one, but it is surely the case that there are more in the North than in the South who prioritise conservation of nature over the alleviation of poverty,

The question of global/local and the role of the market have been confounded by the whole globalisation issue. Here, there may be allied (but not precisely similar) concerns between those who oppose globalisation because of its exploitative effect and those who are interested in its impact on the environment. And the global/local contrast in the environmental debate and the North/South contrast of the development debate are becoming linked.² Thus, the North is seen by many in the South as not only imposing the sustainable development debate, but also their own self-interested conclusions from that debate. And the North claims to represent the global rather than the local. This question «who speaks for the globe?» raises fundamental ethical and political questions to which I now turn.

² As the radical Third World environmentalist Vandana Shiva has put it «the global is defined as North, and the local as South»:

«The G7 can demand a forest convention that imposes international obligations on the Third World to plant trees. But the Third World cannot demand that the industrialized countries reduce the use of fossil fuels and energy. All demands are externally dictated - one way - from North to South. The ‘global’ has been so structured, that the North (as the globalized local) has all rights and no responsibility, and the South has no rights, but all responsibility.» (Shiva in Sachs, 1993: 154)

The ethics and politics of sustainable development

The central ethical - and thereby also political - issue within the development debate has been the rights of the poor as against the rights of the rich. This has been related to some extent to intra-country conditions, but more especially to inter-country conditions.³

The central ethical/political issue within the environment debate has been the rights of humans as against the rights of nature (other living species).

The sustainable development has often been cast (by the Brundtland Report and others) in terms of the rights of future generations. I suggest, however, that it necessarily involves all three issues:

1. Rights of the poor in the present generation as against those of the rich.
2. Rights of non-humans as against humans.
3. Rights of future generations as against present generations.

Focusing on issue 3 alone is not adequate⁴. There is a complex trade-off between all three which must be addressed. More specifically: should the interests of (rich?) future generations be served at the expense of (poor) present generations? ⁵ Precisely what is the nature of the trade-off available is an empirical question.

The ethical argument for taking consideration of the rights of future generations is not generally contested. And few contest the rights of the poor in the present generation. By contrast, the ethical argument in the case of non-humans is contested, although there seems to be some shift in favour of 'animal rights' in the North in recent years.

But all this is within the realm of theory. In practice, of course, rather little is done within many countries, and very little is done between countries, to counteract the great inequalities of wealth and power. In the real world, there is a wide gap between ethical ideals and practice. Yet, I suggest, debates couched in ethical terms do have some influence on politics and personal behaviour. And academics contributing to the debate have an influence, even when they seek to avoid taking any normative position⁶. The influence of the researcher in the sustainable development debate depends largely on how that debate is conducted. I turn therefore more specifically to the question of how the 'idea' of sustainable development has contributed to the framing of the debate.

³ This is not to be confused with the empirical question whether greater equity is positively or negatively correlated with growth.

⁴ I should stress that all three issues are discussed in the Brundtland Report. And some of what I have just said is, in effect, stated there. For example:

"Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation. ... The protection of nature is not only a goal of development. It is also a moral obligation toward other living beings and future generations." (WCED, 1987:43)

But the 'standard' definition of sustainable development, and the thrust of the argument in the Report are, I maintain, focused on only the last of the three issues.

⁵ Ref. the brief discussion by Solow in the UNDP's Human Development report 1997.

⁶ This has been the case, for example, over the controversial question of valuing life, as addressed by Working Group 3 of the Intergovernmental Panel on Climate Change.

Framing the global agenda

Issues compete for attention on the global agenda. It is a challenging task to bring an issue to the public eye, and keep it there; and this may sometimes be achieved at the expense of the substantive content of the issue itself.

Powerful forces – whether they be states, organisations, or even perhaps, disciplines - exercise their influence largely by ‘framing’ the discourse: a process which may serve to limit the power of potentially radical ideas to achieve change. The exercise of framing is composed of two parts: one, drawing attention to a specific issue (such as the environment); two, determining how such an issue is viewed. In other words, a successful framing exercise will both cause an issue to be seen by those that matter, and ensure that they see it in a specific way. And this is achieved with the minimum of conflict or pressure. For the ideas appear to be ‘natural’ and ‘common sense’.⁷

The ‘idea’ of sustainable development has been extremely successful in the first regard: putting the environment on the agenda. But I question how successful it has been in the second. Its success in the first regard cannot be in doubt. Although it would be wrong to attribute everything to the idea itself, the massive and successful Rio conference and its follow-up provide strong empirical evidence. And the impact on both policy-makers and researchers has been massive. Evidence of the former is to be found, for example, in the number of policy papers on the topic, and the establishment of new divisions of sustainable development in many international agencies. Evidence of the latter is the number of articles, books and doctoral dissertations with the term ‘sustainable development’ in them.

But what has the idea contributed to the content of the debate which it has stimulated? And how has the idea been modified in the process? Evidence from the study of other influential ideas suggests that these are often distorted in various ways.

The idea of sustainable development

Sustainable development is one of several ideas we are studying under the so-called CANDID-project. CANDID stands for ‘the Creation, Adoption, Negation and Distortion of Ideas in Development’.⁸

Here, we are studying the interface between research and policy. For the purposes of the research we define an idea as “a concept which powerfully influences development policy. It is more than simply a slogan or ‘buzzword’ because it has some reputable intellectual basis, but it may nevertheless be found to be vulnerable on analytical or empirical grounds. What is special about such an idea is that it is able to operate in both academia and policy domains. It arises and is developed in the interplay between these two domains, but it derives its credibility for policy largely from its basis in academia.” (Bøås and McNeill, 1999).

⁷ Ideas such as sustainable development are hegemonic in the terms used by the political scientist Robert Cox who argues that “hegemony frames thought and thereby circumscribes action.” Cox (1992:179) Economists tend to be less aware of the power of ideas, but it is relevant to refer to the work of Schumpeter who noted that “Analytic effort is of necessity preceded by a preanalytic cognitive act that supplies the raw material for the analytic effort.” His book ‘The Foundations of Economic Analysis’ is largely concerned with ‘this preanalytic cognitive act’, which he calls ‘Vision’ (Schumpeter, 1954: 41).

⁸ The project, primarily undertaken by Morten Bøås and myself, both from SUM, is financed by the Norwegian Research Council, and is a study of the role of ideas in multilateral development institutions, such as World Bank, UNDP, Inter-American Development Bank, IMF, WTO.

Powerful ideas in development policy are those which are widely accepted and lead to real changes in policy. They may be distinguished from:

- words that make a difference (slogans – in the realm of activism)
- words that make no difference (technical jargon – in the realm of academia).

Common to these ideas, we find, is that they serve – or seek to serve – as a bridge: not only between researchers and policy-makers, but also, in many cases, between different disciplines, and between alternative policies.

But consensus around a new idea is often achieved at the expense of its substantive content. A new idea must be understood and accepted – and yet not be too threatening. Ideas are therefore often, to varying extents, distorted. One way in which new ideas are often distorted is what I call ‘overextension’. A good example is the idea of the informal sector from the 1970s. This proved to be a most useful and influential concept, but it suffered by being grossly overused (‘informal transport’, ‘informal housing’, ‘informal finance’, etc) which caused it to lose its clarity and analytical edge. The same happened to sustainable development. Thus we read of ‘sustainable human development’, ‘sustainable institutions’, ‘sustainable democracy’, etc.

Another important way in which ideas are distorted is by becoming more technical, and drained of their political content. A good example of this is the concept of governance from the 1990s, which from being a necessarily political concept of broad application has been narrowed and depoliticised to focus on management, privatisation, and corruption. Such processes of ‘technification’ and ‘depoliticisation’ are often accompanied by the increasing dominance of an economic approach. The fate of another, more recent, idea - social capital - is still in the balance, but seems to be going the same way.

These processes are to some extent inevitable in moving from theory to practice - to ‘operationalise’ ideas - but they nevertheless often distort the original ideas, in ways which seem to follow an observable pattern.

In the case of sustainable development a similar pattern of distortions can to some extent be shown, but with an interesting difference. It is true that the debate on environment and development within both international institutions and academia became increasingly technical – and indeed economic – as the concept of ‘sustainability’ was tested analytically, leading to more rigorous definitions of ‘weak’ and ‘strong’ sustainability, discussion of the potential for replacing natural by other forms of capital, etc. But did it become ‘depoliticised’?

I would suggest that in the case of sustainable development the ‘depoliticisation’ is inherent in the idea itself. To put it starkly, the idea, as defined in the report of the Brundtland Commission, largely evades the central political issue – of the rights of the poor in the present generation.⁹ Indeed, the report, I suggest, to a large extent plays down the conflict between economic growth and the conservation of the environment. And since that time, the emphasis in global policy debates has been largely on so-called ‘win-win’ policies – such as the removal of subsidies for irrigation water or the development of energy-efficient cars. These are certainly well worth pursuing – and it is understandable in the light of political reality that

⁹ A strong advocate for the environment might agree that the central issue is ducked, but identify this not as the rights of the poor in the present generation but the rights of non-human nature as against humans.

these are the main focus. But this may have biased the debate. A more extreme bias arises from the assumption that the reduction of poverty is the key to reducing environmental degradation; a claim which has not generally been borne out by research. On the contrary, it is clear that increasing affluence is a large part of the problem, as well as being potentially part of the solution.

Different uses and users of the term

The forthcoming international conference in Johannesburg will be a new opportunity to test the issue: both conceptually and politically. And it will be interesting to see how the 'idea' of sustainable development stands up. I have no doubt that it will again be very much in use; but it must be remembered that the term is used in a number of different contexts, and by different categories of people.

At one extreme are academics. They require a very rigorous definition of sustainable development. For them, whether there is a conflict between environment and development is a matter of empirical testing, and neither the environment nor economic growth should, *a priori*, be more highly valued. At the other extreme are the activists. For them, either economic well-being or the environment is explicitly valued; less emphasis tends to be placed on empirical testing of the potential conflict (and, perhaps, the rigour of the definition of the term). They will often assert that there is a conflict between environment and development, and that one or the other should have priority.

But those who deal with policy and politics need to establish a consensus – whether real or apparent. Those who are most directly engaged in a conference such as this are bureaucrats and politicians. Although advised and influenced by both academics and activists, they are in the business of preparing policy documents, which are often the place for vague formulations - both in order to achieve apparent consensus between different positions, and to avoid excessive commitment to concrete action. In view of this, will use of the term 'sustainable development' provide an opportunity at Johannesburg for avoidance of the most controversial issues?

Conclusion

The report «Our Common Future» was a remarkably successful agenda-setting exercise. It focused on a perceived dilemma – the potential conflict between growth and the environment - and encapsulated this very neatly in the term sustainable development. Consensus in the document, and subsequently, was, however, achieved at some expense: both in academic and policy terms.

Given the diversity of perspectives and interests, some confusion as to the meaning of the term could not be avoided. But this confusion has to some extent obfuscated the central empirical question of whether, or under what circumstances, there is in fact conflict between increased material well-being and the environment¹⁰. An equally serious error, I suggest, is the predominant ethical focus on the rights of future generations, for the two other ethical dimensions to the debate cannot be ignored. Both of these limitations in the report can be explained, perhaps excused, on the grounds of pragmatism. Sustainable development is an

¹⁰ Despite this, there is now considerable evidence against the view - crudely expressed - that «it is the poor that cause environmental damage». It would be more accurate to say - if sweeping judgements are to be made - that it is affluence rather than poverty which is the greater threat to the environment. This has led to increased interest in the impact of consumption patterns of the rich, and the concept of sustainable consumption.

intensely political issue, and it may be thought that change is more likely to be achieved through consensus than confrontation.¹¹ But real differences of perspective cannot forever be ignored, and some of these are clearly beginning to emerge: both with regard to what global policy measures are proposed and the grounds for proposing them.

The negotiations concerning global warming (notably in Kyoto) indicate that there is some slight movement towards an international response in which the burden is to a greater extent borne by the richer countries. Some will say that this is too little, too late; but it should be recognised that proposals such as the idea of tradable quotas are very radical, and represent a significant shift in political, and arguably also in ethical, terms. Political arguments often require ethical underpinning, however flimsy these may seem. The future generations argument seems to be effective to an extent that the present poverty argument has not been; at least for the rich countries. But what about big, and increasingly rich, countries like India, China and Brazil? What will stir them to action? Global warming has rightly been identified as «the archetypal global problem.» (Bhaskar and Glyn, 1993: 5)¹² and the discussions surrounding it will both reflect and determine the broader discussions concerning other aspects of the sustainable development debate. It is archetypal in several respects: for example, the ethical issues that arise concern the rights of present as much as future generations; and the empirical evidence for the nature (and even the existence of) a trade-off is disputed. Global warming is certainly not the priority issue for many of the poorest people of the world, but it does in many ways exemplify the challenge - practical, ethical and political - posed by the concept of sustainable development.

In summary, the idea of sustainable development was brilliant in terms of putting the environment on the agenda. In the 15 years since then, or 10 years since Rio, some progress has been made. In analytical terms, the concept has been sharpened, with concepts such as strong and weak sustainability – although these have not always spread over into policy-making. More is now known about the relationship between economic growth and the environment; and, most importantly, the claim that poverty is the main, or even a major, cause of environmental degradation has not been proven – although the resulting policy implications are not widely accepted. Politically, rather little progress has been made.

The idea of sustainable development remains an ideal. And there is still no easy answer as to how to achieve it. The environment is still on the agenda, but many people in the South feel that it has gained this position at the expense of development. Perhaps they are right.

¹¹ At Rio, apparently, the issue of consumption in the North was played down, in exchange for a similar treatment of the issue of population growth in the South.

¹² «As the developed industrial countries generate about 80 per cent of total global pollution, developing countries often remark that they do not want to sacrifice their development - thus mitigating some environmental damage - in order to manage the problems caused by the industrialized countries. Some of the more radical experts or political figures of the South even accuse the North of environmental imperialism ...» (Bhaskar and Glyn, 1995: xii)

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**Environmental Kuzents curves:
Empirical relationships between environmental quality
and economic development**

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Abstract

The paper discusses relationships between environmental and resource qualities and loads, and economic development, theoretically and empirically. We start in section 2 with a list of theoretical arguments that may or may not justify a tendency for environmental quality to first deteriorate, and subsequently improve, as per-capita incomes grow. We then in section 3 consider the empirical evidence on these issues, associated with the concept of “environmental Kuzents curves” (EKC). This evidence indicates that such EKC relationships largely hold for local pollution indices, but not necessarily for environmental and resource variables where effects occur on a global scale, such as biodiversity and carbon emissions. We discuss reasons for these differences, and their possible long-run implications.

1. Introduction

The relationship between economic development and environmental and resource loads on our planet is a central issue, perhaps the overriding issue for mankind for the century that lies ahead of us. Inevitably, it seems, we will face further surges in economic output, which are likely to raise material consumption in the richer part of the world, and even more that of the poorer part so as to bring living standards up to levels approaching those enjoyed by us. In addition world population will increase, possibly double from the current level of about 6 billion. A crucial question is then whether this development is at all possible without necessarily damaging the very basis for our existence, the Earth itself, beyond repair. In a fascinating new book, our globe's perhaps most influential biologist today, Edward O. Wilson, seriously questions the Earth's ability to sustain a population much beyond 10 billion, let alone bring this population up to living standards remotely close to our own.¹ In his opinion we are approaching the limits of the Earth's carrying capacity in a number of respects, such as freshwater resources and the exploitation of its photosynthetic capacity. The perhaps most interesting aspect of the book, at least from the point of view of economists such as myself, is however his idea that science and technology may, somehow, circumvent many or most of these problems, provided that we are sufficiently lucky and diligent in its development and application to the central environmental and resource problems facing us. Presuming that population growth halts and global population reaches a maximum of around 10 billion, as currently projected by the United Nations' Population Division, catastrophic environmental degradation and resource depletion need perhaps not be inevitable, given that we are sufficiently careful in applying appropriate technologies in appropriate ways.

At the very center of such a discussion stands the concept of an "environmental Kuznets curve" (or simply EKC in the following). This concept is named after the Nobel price winning economist Simon Kuznets (who received the 1971 price for his work on economic growth), who hypothesized that the relationship between income inequality and income level would follow an inverted U-shaped curve.² The adaptation of Kuznets' idea to environmental and resource economics involves the intellectual idea that economic development need not necessarily involve increased environmental degradation, as well as empirical observations, that environmental improvements are possible together with material economic progress. It is here sufficient to remember the London smog which during the 19th century, on a regular basis, seriously worsened the health situation of the London population during periods of unfavourable meteorological conditions. Such episodes are today history, and reminds us that, in many respects and places, environmental conditions have been worse than they are today.

EKC curves can be defined for inclusive or specific measures of environmental and resource conditions or states. An inclusive measure would be the construction of a general index for environmental quality, or resource availability, and study the relationship between economic development and this index. A more specific measure might involve deriving such a relationship for one particular pollutant or resource. Most practical applications to date have considered such more specific measures. Considering a particular pollutant, an EKC relationship then in this context implies that the level of this pollutant will increase when per capita incomes rise, but only up to a

¹ See Wilson (2002), excerpts of which are published in the February, 2002, issue of Scientific American.

² See Kuznets (1955).

certain point. When incomes rise beyond this point, pollution will level off and eventually start decreasing.

Starting in the early 1990s, a number of researchers have attempted to estimate such curves for individual pollutants and resource indices, as will be documented below. Central in this early work was efforts made by the World Bank related to the World Development Report 1992, which was to a major extent devoted to this issue. We have later seen a virtual explosion of studies dealing with the issue; some of this literature will be considered more carefully in the following.

As in all economic analysis, also the EKC concept requires a theoretical basis. Our exposition in the following, in section 2, will start summarizing some of the theoretical ideas invoked to explain this phenomenon. In section 3 we will go through some of the most important relevant literature, while section 4 concludes.

2. Theoretical perspectives on EKC curves

Traditionally, among economists and laypeople alike, the prevailing view is that “more development”, in the form of higher levels of income and standards of living, inevitably leads to greater environmental deterioration. Such a view of the development process may be natural considering the types and magnitudes of environmental deterioration that has followed from economic development over the last two hundred years. The basic idea behind the Kuznets curve concept is however that this is generally not a valid general view of the development process. A number of economic forces may serve to counteract an inevitable negative relationship between economic development and environmental degradation. We will here briefly discuss some of the most important of these.

1. As per-capita incomes grow, there is a tendency for a larger share of total demand to consist of services, and a smaller fraction to consist of manufactured goods, agricultural products and raw materials. Services are generally less energy and resource intensive than goods, in their production and consumption. As society switches more and more to services, energy and resource intensity of production and consumption, and thus environmental and resource burdens, are likely to grow less rapidly than output. This argument however does not by itself explain a reduction in environmental and resource burdens as incomes grow, unless the volume of goods consumption is actually reduced; it can only explain a lower environmental and resource intensity, per unit of output volume. The latter does not seem likely as a general tendency.
2. General technological progress leads to greater efficiency in the use of energy and materials. Thus a given amount of goods can be produced with successively reduced burdens on natural resources and the environment. One aspect of this progress may be better and more efficient reuse and recycling of materials, which (coupled with their greater efficiency in use) can yield large resource savings.
3. As incomes grow, population preferences change, and then also the value placed by the population on preservation and a clean environment. It is generally recognized that the income elasticity of environmental and resource goods are in excess of unity, i.e., preservation and environment are “luxury goods”. In democratic societies this will be manifested in the political process by greater pressure in the direction of preservation and improved environment, at least locally in the country in question. Among the practical implications of such forces are stricter government rules regulating resource and environmental conditions, higher taxation of polluting discharges, taxation of particular resource inputs of products, and

subsidized investments and research with the aim to combat pollution and high resource use.

4. A point related to the previous one is that certain political variables may change together with economic development, and also work in the direction of lower environmental and resource burdens. One such factor is that a more educated population may lead to pressure for democratic reform in initially undemocratic societies. If there then is a tendency for more democratic societies to be more environment and resource friendly (e.g. because undemocratic societies are dominated by business leaders with less environmental interest), there may be a reinforcing effect on the degree of “environmental friendliness” of such a society.³ Note that this effect is separate from point 3 where the idea was that basic preferences shifted in the direction of more environmental friendliness. Here the point is rather that, for a given degree of environmental friendliness within the population, such preferences will to a greater degree be manifested in political action to preserve the environment when society becomes more democratic, which in turn is more likely when incomes grow higher.

5. Since different countries are at different levels of income, and thus (from point 3 above) have different degrees of aversion against pollution and high resource use, there may be room for mutually gainful trades between countries, in such a way that environmentally burdening production may tend to be located in low-income countries, while the consumption of such goods largely takes place in higher-income countries. Such activities, sometimes associated with the term “environmental dumping” may in case tend to reduce the resource and pollution loads in the rich countries, at the expense of higher such loads in lower-income countries. Statistically, it will appear in the form of relatively lower environmental loads on high-income countries, and higher loads on low-income countries.

Out of these five types of argument, the first can most likely not by itself explain a tendency to reduce the absolute environmental and resource burdens for high-income countries, unless overall goods consumption drops with income in such countries. The latter appears not likely. Points 1-4 however interact and may have considerable overall force. Arguments described under point 2 imply that lower environmental burdens are byproducts of a general technological level, which may be highly important for explaining differences in environmental and resource burdens between rich and poor countries. It is well known, and amply analysed and documented in particular the recent “endogenous growth” literature, that there are enormous divergencies in the degree to which advance technologies are applied across countries.⁴ Indeed, a central aspect of being underdeveloped is just the inability to apply advance technologies, with their more efficient use of resources and less pollution intensity.

The third and to some degree the fourth arguments are particularly important for explaining possible tendencies for local (by this we mean national or lower levels) burdens of pollution and resource use to drop with income. The preferences of a given population for better environment, and the political implementation of such preferences, will usually lead to action which affects the environmental and resource situation in that country, but not necessarily much beyond. In particular, it does not guarantee action in cases with great conflict of interest among countries. Great biases in

³ Torras and Boyce (1996) find such effects using the same data as Grossman and Krueger (1995) discussed below, and effects are particularly strong for the group of developing countries.

⁴ For relevant references see e.g. Aghion and Howitt (1998), Barro and Sala I Martin (1995), and Romer (1990).

favor of solving local versus global environmental problems should then tend to indicate that the preference argument is quantitatively important.

Note also that if the fifth argument is important, one should perhaps expect high-income countries to have fewer environmental problems than low- or middle-income countries, as implied by the EKC principle, but still, perhaps, that average environmental quality deteriorates as all countries' incomes grow. This will have implications for interpretations of different types of empirical EKC relationships. In particular, cross-section studies at a given point of time may yield higher environmental quality in high-income than in low-income countries; still, time-series studies for given economies, that grow over time and retain their position in the world income distribution may yield that environmental quality deteriorates with income. A comparison of these two types of data may then help to indicate the importance of this argument.

Note finally in this section that theoretical models have been developed which yield the basic EKC result, namely an inverted U-shaped curve between a comprehensive environmental degradation measure and income, under fairly general conditions (Lopez (1994), Selden and Song (1995), John and Pecchenino (1994), McConnell (1997)).

3. Empirical issues

The EKC issue is essentially empirical. An important set of empirical issues relates to how to define a relevant measure of environmental and resource quality. Most researchers attacking this problem have not attempted to derive one comprehensive measure, but instead found it more useful to approach the EKC issue for each of a number of narrower measures. Three main groups of such variables can be identified: first, variables representing general living conditions which are strongly related to environmental and resource goods; secondly, ambient environmental and resource qualities at the local or average national level; and thirdly, environmental or resource variables in any given country that impact strongly on other countries. The seminal World Bank study (World Bank (1992)), which to a major degree built on Shafik and Bandyopadhyay (1992), focused on the following ten issues: lack of clean water, lack of urban sanitation, ambient levels of suspended particulate matter, ambient sulphur oxides, change in forest area (between 1961 and 1986), annual observations of deforestation (over the same period), faecal coliforms in rivers, municipal waste per capita, and carbon emissions per capita. The two first of these most reasonably belong to category 1 mentioned above; carbon emissions to the third category; while the rest belong to the second category (except that the forest variables perhaps belong to both the two latter categories). Another influential study, Grossman and Krueger (1995), focused on three types of group 2 variables, namely three measures of ambient air quality, six measures of water quality, and five measures of heavy metals concentrations. A third large influential study, Selden and Song (1994), consider four different ambient air quality variables, i.e. also variables of type 2. Overall, it is fair to say that variables of type 2 (representing national levels of ambient recipient or resource quality) have received the most attention in the EKC literature.

We will now examine results from some important available studies for specific environmental and resource variables, and start with national air pollution indices in table 1. 5 different measures are included in the table, namely sulfur dioxide, smoke, heavy particles, NO_x and CO. The first of these stems mostly from heavy industry and power generation, the two last largely from road traffic, while the remaining two may be caused by both of these sources. We see that the studies surveyed are almost unanimous in finding that overall national air pollution levels peak at a certain per capital output, i.e., when per capita output exceeds the stated peak level, pollution

drops. For sulphur dioxide this result is however not entirely clear in the most recent studies (by List and Gallet and by Stern and Common). If these data indicate a peak, it is in case at a too high income level to make the results reliable. "By and large", however, these studies show that air pollution peaks.

Table 2 considers 6 measures of national water pollution. The Grossman and Krueger (1995) study covers all these, and indicates peaks in every case, which occur from a low of 2700 USD per capita for dissolved oxygen, to a high of 10000 USD per capita for nitrates. The Shafik and Bandyopnadhayay (1992) study however by contrast does not find any peak for dissolved oxygen.

The Grossman and Krueger study also provides estimated EKC curves for 5 different heavy metals, reproduced in table 3, and also here in all cases find peaks; the lowest occurs for lead, at 1900 USD/capita, and the highest at 11600 USD/capita, for cadmium.

Our last table, table 4, sums up a number of studies dealing with other variables. These fall in three main categories. First, we have two variables which characterize general living conditions influenced heavily by environmental conditions, namely lack of water and sewage connections, and amount of municipal waste. Here Shafik and Bandyopadhyay (1992) find a uniform tendency for water and sewage coverage to increase with income, but on the contrary, for municipal waste to increase with income. The latter result is of courses contrary to the EKC principle, but may indicate that the municipal waste problem has not yet reached sufficient proportions for the individual countries, to warrant efforts of the magnitude necessary to reduce the waste amount. The second type of variable is the deforestation rate, where results are mixed: Panayotou (1995) finds a peak at a very low income level, Cropper and Griffiths (1994) at somewhat higher levels, while Shafik and Bandyopadhyay (1992) find no relation to income for this variable.

The last variables included in our table are per capita energy use and CO₂ emissions, which are strongly related considering virtually all countries reliance on fossil-fuel energy consumption.

Table 1: Summary of EKC studies for national air pollution indicies. All figures in USD

| Study | Sulfur Dioxide | Smoke | Heavy particles | NO _x | CO |
|--|---|-------------------|--------------------------|-----------------|---------------|
| Grossman-Krueger (1995) | Peak at 4050, trough at 14000 | Peaks at 6150 USD | Monotonically decreasing | | |
| Shafik and Bahdyopadhyay (1992); Shafik (1994) | Peaks at 3300 | | Peaks at 3-3500 | | |
| Panayotou (1995) | Peaks at 3000 | | Peaks at 4500 | Peaks at 5500 | |
| Selden and Song (1994) | Peaks at 8700 | | Peaks at 10300 | Peaks at 11200 | Peaks at 6000 |
| List and Gallet (1999) | Variable, peaks at 22000 (US only) | | | | |
| Stern and Common (2001) | Peaks at 9000 (OECD), 30-100000 (world) | | | | |

Note: Figures are not always comparable; mostly in 1990-1995 USD at PPP rates.

Table 2: Summary of EKC studies for national water pollution indicies.

| Study | (Minus) dissolved oxygen | BOD | COD | Fecal coliform | Total coliform | Nitrates |
|---------------------------------|--------------------------|---------------|---------------|----------------|----------------|----------------|
| Grossman and Kruger (1995) | Peaks at 2700 | Peaks at 7600 | Peaks at 7800 | Peaks at 8000 | Peaks at 3100 | Peaks at 10000 |
| Shafik and Bandyopadhyay (1992) | Increases uniformly | | | | | |
| | | | | | | |

Table 3: Summary of EKC studies for national concentrations of heavy metals

| Study | Lead | Cadmium | Arsenic | Mercury | Nickel |
|----------------------------|---------------|----------------|---------------|---------------|---------------|
| Grossman and Kruger (1995) | Peaks at 1900 | Peaks at 11600 | Peaks at 4900 | Peaks at 5100 | Peaks at 4100 |
| | | | | | |
| | | | | | |

Table 4: Summary of EKC studies for other environmental and resource indicies

| Study | Lacks water and sewage connections | Municipal waste per capita | Deforestation rate | Per-capita energy use | Per capi emissions |
|---------------------------------|------------------------------------|----------------------------|---|-----------------------|--------------------------------|
| Shafik and Bandyopadhyay (1992) | Uniformly decreasing | Uniformly increasing | No relation to income | | |
| Cropper and Griffiths (1994) | | | Peaks at 4800 (Africa), 5400 Latin America) | | |
| Shafik (1994) | | | | | Peaks at 35000 |
| Holtz-Eakin and Selden (1995) | | | | | Uniformly increasing |
| Panayotou (1995) | | | Peaks at 900 | | |
| Horvath (1997) | | | | Uniformly increasing | |
| Schmalensee et.al. (1995) | | | | | Increases decrease: 10000 USD) |

4. EKC curves: Where do we stand?

We have in the past section of this paper gone through some of the most important empirical evidence to date, dealing with the EKC concept. A major question is what this evidence can tell us about the expected quality of the Earth in periods to come. One rather clear piece of evidence is be that purely local environmental indicies, or measures of life quality for local populations, generally seem to improve with income. In the data surveyed, this applies to most air and water pollution indicies, heavy metal pollution levels, and coverage of tap water and sanitation. These are variables over which local and national governments have good control, and the theoretical factors 1-4 studied in section 2 above, then come to play in a beneficial way. It here appears that factor 5, which involves the possibility of “environmental dumping”, seems to play a small quantitative role, at least so far.

The situation is different for environmental and resource indicies that it only makes sense to define on a transnational level. Here the situation is bleaker, for various reasons. First, coordinated action across countries is much more difficult, both because of direct coordination problems and because different countries may feel they have different interests. Secondly, some of the variables involved here, such as global

warming factors and biodiversity, are seemingly irreversible processes which can go only one way. There is for instance little we can do to “repair” the damage done by species that have already disappeared from the Amazon rain forest, Antarctic ice caps that have already melted or coral reefs that have already vanished; or to lower already increased atmospheric carbon dioxide levels. In short, many of the global environmental and resource measures are by their nature irreversible and cannot possibly be improved through higher incomes. Perhaps equally problematic, some of these global indicators seem to be essential inputs for increased economic development, at least for the time being. This certainly applies to global water resources, including groundwater aquifers, and to fossil fuels causing increased carbon emissions.⁵ This situation might change, but at least today one does not see much indication of this.

Overall, thus, I will adopt Wilson’s (2002) view, of cautious scepticism. One shall not underestimate humankind’s ability for adaptation and progress, and thus the ability (at least in a technical sense) to overcome the main environmental, resource and ecological problems that lie ahead. This however probably requires concerted efforts on a global scale, in the form of directed technical progress and cross-border cooperation, which are so far unprecedented. It may be too much to hope for, but one may of course hope.

⁵ True enough, some authors point to the purely technical possibilities of increased production without increasing these loads; see e.g. Anderson (2000). As an example, it is true that our current energy demand can be met several times over through proper exploitation of solar power alone. These presentations however ignore basic economic incentive effects whereby production costs are several times higher for such energy types, at least currently. Much has been spoken over solar energy during the last 30 years; little has however been done.

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Har Norge sviktet? Vår oppfølging av Brundtland-rapporten.

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"Har Norge sviktet?" "Sviktet" - eventuelt hvem, og i forhold til hva? Min målestokk i dette innlegget er ikke hva som kunne vært mulig i norsk politikk i disse årene, og heller ikke hva Norge har gjort eller ikke har gjort sammenlignet med andre land. Min målestokk vil være selve Brundtlandrapportens anbefalinger. Dermed legges naturligvis listen høyt.

Brundtlandrapportens viktigste anbefalinger er vel kjent av de aller fleste. Den ga begrepet bærekraftig utvikling et annet og bredere innhold enn det hadde tidligere. I den utstrekning det i det hele tatt hadde vært brukt, var det først og fremst som slagord for en langsiktig miljøpolitikk, og for vern av naturgrunnlaget. Nå kom en viktig dimensjon i tillegg: kampen mot fattigdom. Å fjerne fattigdommen i dagens verden ble ikke bare inkludert i begrepet. Den sosiale oppgaven - "...møte dagens behov...", dvs. rettferdighet her og nå - kom til slutt helt øverst på Verdenskommisjonens dagsorden. Rapporten inneholder et viktig sosialt program, og et program for demokrati, deltakelse og menneskerettigheter.

Det er på denne bakgrunn man må forstå den store vekten Kommisjonen la på økonomisk vekst. Ikke bare avviste den nullvekst som løsning på miljøproblemene, men den ga en klar anbefaling om en sterkere økonomiske vekst. Dette er det første punktet i Kommisjonens strategi for en bærekraftig utvikling. For å kunne gi den fattige befolkningen i utviklingslandene bedre levekår. Og NB: vekst ikke bare i de fattigste landene. Sterkere vekst *også* i industrilandene.

Dette kan virke overraskende, siden Kommisjonen samtidig konstaterte at den økonomiske veksten i industrilandene er en hovedårsak til miljøproblemer. (I tillegg pekte Kommisjonen som kjent på at også fattigdom kan være en årsak til miljøproblemer.) Når Kommisjonen landet som den gjorde på dette helt sentrale punktet, var to elementer avgjørende:

Kommisjonen la til grunn at det er en direkte sammenheng mellom økonomisk vekst i industrilandene og i utviklingslandene. At økonomisk vekst i utviklingslandene i stor grad er avhengig av økonomisk vekst i i-landene, slik internasjonal økonomi virker. Erfaringer fra de siste tiår hadde vist at et økonomisk tilbakeslag i industrilandene ofte fikk klart negative økonomiske konsekvenser for utviklingslandene. Jeg vet ikke om alle økonomer er enige i dette idag, men dette var en sentral premiss for Kommisjonen.

Det andre elementet var nok noe mer uklart, men samtidig helt fundamentalt: Selve *innholdet* i veksten - "the quality of growth" - måtte forandres, etter to dimensjoner som begge var vesentlige for kommisjonen:

Den ene var at veksten må *fordeles vesentlig bedre* og mer rettferdig både mellom rike og fattige land, og innenfor hvert enkelte land, både i industriland og utviklingsland.

Den andre var at veksten må skje *med mindre forbruk av naturressurser* og med vesentlig mindre miljøbelastninger. Her hadde Kommisjonen front først og fremst mot industrilandenes produksjons- og forbruksmønstre, som den klart karakteriserer som ikke bærekraftig. Det er uakseptabelt at noen land skal fortsette å ha en materiell levestandard høyt over det som vil kunne tillates dersom hele verdens befolkning skulle ha den samme.

Ett viktig stikkord i rapporten for å oppnå disse grunnleggende endringene var integrasjon. *Målet om bærekraftig utvikling må integreres i alle samfunnsområder og sektorer*, og i den økonomiske politikken generelt, og den må bli en målestokk for virksomheten i næringslivet, i forskning, teknologisk utvikling, i utdanning osv.

Dette er - forsøksvis - Kommisjonen budskap om bærekraftig utvikling i et nøtteskall, og det jeg mener Norges oppfølging egentlig bør måles mot.

Hvordan er så dette fulgt opp?

Den første stortingsmeldingen om oppfølgingen av Brundtland-rapporten (St.meld. nr. 46 fra 1989), var i rimelig grad lojal mot rapportens brede mål og perspektiver. (Det måtte man nesten kunne vente i og med at Gro Harlem Brundtland fortsatt var statsminister.) Selv om miljødimensjonen dominerte, diskuterte den bærekraftig utvikling på viktige politikkområder som samferdsel, landbruk, industri og energi. Vi finner kapitler om økonomisk politikk og bærekraftig utvikling, og om forholdet til utviklingslandene, gjeldsproblemer, handelspolitikk og råvarespørsmål. Det var et bredt og i grunnen et ganske imponerende dokument.

Men denne brede forståelsen og behandlingen av målet om bærekraftig utvikling fikk en kort levetid i norsk politikk. Den politiske dagsorden skiftet fort. Vi fikk økonomisk tilbakeslag, høy arbeidsløshet. EØS-avtalen og EU-medlemskap overtok oppmerksomheten. Vi fikk i Norge ingen bred oppfølgingen av Rio-konferansen i 1992, i motsetning til i mange andre land. Agenda 21 er oversatt til svensk, men er aldri blitt oversatt til norsk.

Ganske fort ble politikk for en bærekraftig utvikling først og fremst, for ikke å si nesten helt, ensbetydende med *miljøpolitikk*. I regjeringen var det snart bare miljøvernminister Torbjørn Berntsen som snakket om bærekraftig utvikling, og det sies at han ikke fikk særlig gehør.

Brundtlandkommisjonen selv var meget opptatt av at bærekraftig utvikling ikke bare var et annet eller nytt navn på miljøvern. Det var *også* miljøvern, for all del. Men det å bøte på uheldige miljøvirkninger av samfunnsutviklingen, var ikke det viktige. Det som teller er å "attack the sources". Det er *årsakene* - både til miljøproblemene, den skjeve fordelingen og de globale fattigdomsproblemene - vi må gjøre noe med; livsstil og forbruksmønster, politikken på tunge sektorer som energi, transport, landbruk, bypolitikk, ikke minst handelspolitikken, Nord-Sør-politikken og den økonomiske politikken generelt, helse- og befolkningspolitikk i utviklingsland. Det er min påstand at vi aldri tok denne utfordringen alvorlig.

Hva ha skjedd i Norge siden 1987? La meg trekke frem noen tall som kan gi grunnlag for diskusjon - selv om mange sikkert vil mene at dette blir for enkelt.

Siden 1987 har *Norges BNP* økt med godt over 40 prosent, som er vesentlig høyere enn veksten både i OECD-landene samlet, og globalt. Dette er naturligvis ikke i seg selv galt, ei heller i strid med Brundtland-rapporten. Og for all del, veksten har gitt det norske samfunn mye positivt. Kan vi si at vi har brukt velstanden til å bidra til sosial utjevning mellom rike og fattige land? Vår bistand til utviklingsland er høy sammenlignet med andre land, ca. 0.8 prosent av BNP idag. Men i 1987 var andelen faktisk høyere: 1,1 prosent. Litt krasst sagt: Ikke bare er kaken blitt adskillig større, vi beholder også en større del av den selv. Mye positivt er nok skjedd i bistanden. Men vi har stadig i meget liten grad åpnet våre markeder for varer fra utviklingsland, som var et hovedpunkt for Kommisjonen.

Oljepolitikken kunne ha vært et sentralt punkt i en norsk politikk for en bærekraftig utvikling. Kommisjonen så verdens avhengighet av petroleum som energikilde som et av de største hindringer for en bærekraftig utvikling. Her utfordres både utvinningstempo, produksjonsmåter, anvendelsen av ressursene, og bruken av inntektene. Denne viktige - og naturligvis svært krevende - analysen og diskusjonen kom ikke hos oss. Utvinningstempoet er blitt høyt. Til tross for anstrengelser har det skjedd en kraftig økning av utslipp både til luft og vann fra oljevirkosomheten opp gjennom 90-årene. Vi har fått Oljefondet. I seg selv kan det sees som positivt, fordi det sikrer ressurser for fremtidige generasjoner, men vel å merke fremtidige generasjoner av nordmenn. Etter min mening burde en viss del av Oljefondet brukes strategisk til investeringer i tiltak for å fremme bærekraftig utvikling og fjerne fattigdom i utviklingsland. Det er ikke sikkert at

den langsiktige avkastningen ville blitt særlig lavere, hvis det nå er slik at det skal være det fremste mål.

Har vi brukt den økonomiske veksten til å *utjevne de sosiale forskjellene i Norge*? Forskjellene mellom rike og fattige er blitt større i disse årene. Det er vanskelig å måle og sammenligne fattigdom landene imellom, så her skal jeg være varsom. Men hvis vi holder oss til OECDs relative fattigdomsbegrep - som knytter fattigdom til andel innbyggere med en inntekt som er lavere en halvparten av gjennomsnittet - er det i dag en klart høyere prosent av fattige i Norge enn i de andre nordiske land.

Livsstil og forbruksmønster har ganske visst endret seg i samfunnet vårt, men ikke akkurat i den retningen Brundtlandkommisjonen anbefalte.

Det personlige forbruket har økt med godt over 30 prosent i perioden. Hva slags forbruk dreier det seg om - bortsett fra at en del åpenbart er ren overflod? Litt nøktern statistikk: *Avfallet* fra dette forbruket - husholdningsavfallet - har økt med ca. 50 prosent i det samme tidsrommet, altså mer enn BNP. Vi ligger på topp blant OECD-landene når det gjelder husholdningsavfall pr. innbygger. Også mengden av farlig avfall fortsetter å øke fra år til år. Det positive på avfallssektoren, er at en stadig større andel går til resirkulering og gjenbruk. Men den andelen spises opp fordi den totale mengden øker så sterkt.

Samferdselsektoren har heller ikke utviklet seg i en mer bærekraftig retning. Personbiltrafikken har f.eks. økt med minst 30 prosent siden 1987. Hver og en av oss kjører adskillig flere km. pr dag enn vi gjorde den gang. Samtidig er støtten til offentlige kommunikasjonsmidler blitt halvert. Også vårt *energiforbruk* har økt med rundt 30 prosent. OECD konstaterer i sin vurdering at innsatsen for økt energieffektivitet og alternative energikilder har vært svak i Norge. Dette var et meget viktig punkt for Verdenskommisjonen.

Det er riktig at vi har hatt en betydelig reduksjon av noen *forurensende stoffer*, f.eks. SO₂ og ozonnedbrytende stoffer. Ofte er dette en følge av internasjonale forpliktelser. Og her må jeg skyte inn: Vær klar over at EØS-avtalen - altså EU - har vært en viktig drivkraft i skjerpingen av mange norske miljøregler. Forbedringer skyldes altså ikke nødvendigvis oss selv (selv om vi er aktive internasjonalt i mange sammenhenger). Men utslipp av nitrogen, flyktige organiske forbindelser osv. fortsetter å øke, til dels betydelig, i strid med internasjonale avtaler. Og til tross for alle Klimameldingene de siste 10 år har utslipp av klimagasser økt jevnt gjennom 90-årene. Viktige skritt kan nå være på vei. Men hittil har norsk klimapolitikk vært preget av mye skrik og lite ull: svært mange utredninger om mulige virkemidler, men lite av konkrete tiltak for faktisk utslippsreduksjon.

OECD la sist høst frem en vurdering av norsk miljøpolitikk, også i forhold til målet om bærekraftig utvikling. Den viktigste konklusjonen ligger nettopp her. Norge har gjort en god del på miljøområdet. Men mange av forbedringene vi kan se - ikke alle, men mange - spises opp av de mer grunnleggende trendene. Det er OECDs viktigste konklusjon. Det er riktignok utarbeidet miljøhandlingsplaner på en del viktige politikkområder. Men de er kommet sent, de er for svake og blir ikke godt nok fulgt opp. Den sentrale konklusjonen i OECD-rapporten er følgende: *Norge har ikke klart å frakople - "decouple" - miljøvirkninger og ressursforbruk fra den økonomiske veksten.* De negative virkningene av økonomisk vekst føres videre og forsterkes. Vi har ikke fått til bruddet. Her er vi ved kjernen i Brundtlandkommisjonens mål om en bærekraftig utvikling: økonomisk vekst med et annet innhold. Dette har vi ikke klart. Hvis innholdet er endret, er det heller i feil retning.

Langsiktig forvaltning av naturressursene var et sentralt punkt i Brundtlandrapporten. Ser vi på *forvaltningen av fornybare naturressurser* i Norge, er bildet sammensatt. Vi ser gapet mellom liv og lære på mange felt. Flere av våre *fiskerier* er som kjent under sterkt press, og har vært det lenge. Også OECD konstaterer det vi vet: at gytebestanden av flere viktige fiskeslag i vårt område er under en føre-var-grense, det de kaller "safe biological limits". Noen av dem har gått klart nedover i de aller siste år. Dette er vandrende arter, som vi ikke har ansvaret for alene. Men OECDs anbefalinger er klare: Norge må forhandle frem og akseptere lavere fiskekvoter og redusere kapasiteten på vår fiskeflåte.

Oppdrettsnæringen er eventyrlig, men det er et faktum at næringen medfører betydelige miljøproblemer. Situasjonen for *villaksen* er velkjent. Over de siste tiår har laksen forsvunnet fra omlag 50 vassdrag, og er vesentlig redusert i mange andre. Også flere sjøfuglarter langs kysten er betydelig desimert. Jeg kunne nevne andre viktige eksempler på at det biologiske mangfoldet svekkes.

Brundtlandkommisjonen var sterkt kritisk til industrilandenes subsidiering av et miljøskadelig *landbruk*. Omleggingen mot et mer miljøvennlig landbruk går svært langsomt hos oss, og subsidiene opprettholdes stort sett.

Det er vel snart 10 år siden det ble erklært at *reindriftsnæringen* nå skulle bli bærekraftig. Hva er situasjonen? I sin siste ressursrapport karakteriserer Statistisk Sentralbyrå reinbeitene på følgende måte: halvparten av beiteressursene er *helt* nedslitt, 40 prosent *sterkt* nedslitt, og bare 5 prosent intakt - "en dramatisk forverring i forhold til tidligere målinger".¹

Kommisjonen var opptatt av at det den kaller "equity and the common interest" blir beskyttet og styrket. Kommisjonens medlemmer dekket hele det politiske spekteret, men den sa enstemmig og klart: Vi må ha effektive virkemidler for å

¹ Naturressurser og miljø 2001 s. 70-71.

sikre fellesskapsinteressene og en rettferdig tilgang til ressursene. Vi kan ikke basere ressursforvaltningen på frie markedskrefter alene. Dette er en aktuell problemstilling i dagens Norge. Selv arbeider jeg for tiden mye med ressursplanlegging og arealplanlegging, som leder av det såkalte Planlovutvalget som skal revidere plansystemet i plan- og bygningsloven. Og det er to viktige trekk jeg vil nevne: Det ene er de økende motsetningene, konfliktene, over bruk av arealer og ressurser, som egentlig er uttrykk for en økende arealknapphet - i mange deler av landet, både sentralt og i distriktene. Det andre er at det offentlige plansystemet som skal ivareta de allmenne og langsiktige hensyn, de ikke-økonomiske interesser, bygges ned og er på vei til å bli alvorlig svekket i forhold til private interesser og markedskrefter i mange fylker og kommuner. Vi står i stor fare for å få en bit for bit forringelse av både vår naturarv og vår kulturarv, på grunn av kortsiktige vurderinger og snevre private interesser.

Jeg kunne ha vektlagt dette innlegget annerledes, Jeg kunne lagt vekt på det positive som er skjedd på miljøområdet og i bistandspolitikken. Jeg vil ikke undervurdere Norges rolle i internasjonale fora og forhandlinger om miljø, ressurser, menneskerettigheter og utvikling. Vi har arbeidet for gjeldslettelse.

Men når vi ser på det store bildet, er det vanskelig å hevde at vi har bidratt vesentlig til å snu utviklingen i bærekraftig retning. Ingen kan påstå at det ville vært lett å få oppslutning om en vesentlig forskjellig politikk enn det vi har hatt i disse årene, med de politiske strømninger vi ser. En del av de negative trendene er jo også resultatet av de valg og handlinger hver enkelt av oss gjør i dagliglivet og som forbrukere. *Men jeg vil hevde at det egentlig ikke har vært gjort seriøse forsøk på politisk lederskap for å dreie vår samfunnsutvikling i en bærekraftig retning.*

Dette reiser også spørsmålet *om vi har en egnet politisk struktur for å påvirke de tunge krefter og prosesser i en bærekraftig retning.* Kommisjonen mente en viktig årsak til problemene var at politikk og administrasjon er for fragmentert. Vi har hos oss manglet et sterkt ledd i regjeringen som pådriver og samordner av en mer bærekraftig politikk på tvers av sektorene. Spørsmålet bør tas opp på nytt. Regjeringen arbeider for tiden med en ny strategi for en bærekraftig utvikling. Ansvar for denne oppgaven er lagt til Utenriksdepartementet - kanskje fordi det der finnes en engasjert statsråd, om ikke annet. Det kan bety at den internasjonale dimensjonen og utviklingsperspektivet kommer sterkt frem, som er positivt. Men det er ikke en naturlig løsning hvis målet er å få til reelle endringer i nasjonal politikk på de tunge samfunnsområdene. Vi trenger nye og sterkere grep for å følge opp Brundtlandrapporten 15 år etter.

Session 2: Have we succeeded with international agreements?

*The Effectiveness of International
Environmental Regimes*



Oran R. Young

University of Tromsø/Dartmouth College

Seven Propositions about Effectiveness



- **Significance** - regimes make a difference in the sense that their existence and their activities explain some of the variance in collective outcomes at the international level.
- **Variance** - there is substantial variance among international regimes in terms of the level of effectiveness or success they attain.

Seven Propositions cont'd



- Driving forces - institutions always constitute only one of a suite of driving forces that determine the content of collective outcomes.
- Steering - regimes are best thought of in most cases as steering systems whose purpose is to guide behavioral complexes rather than to reconfigure them.

Seven Propositions cont'd



- Equifinality - There are multiple routes to effectiveness; there are no non-trivial necessary conditions for success.
- Behavioral mechanisms - regimes influence the behavior of important actors, including non-members and non-state actors, through a number of distinct behavioral mechanisms.

Seven Propositions cont'd



- Problem structure - although some problems are harder to solve than others, differences in these terms do not correlate well with the effectiveness of the regimes created to address them.

Three Methodological Challenges



- How should we delimit the universe of cases?
- What is the proper measure of regime effectiveness or success?
- What techniques of analysis are most helpful in evaluating levels of regime effectiveness or success?

Next Steps

- How can we explain and predict the actions of those, including government agencies, corporations, non-governmental organizations, and individuals, who are responsible for implementing international environmental regimes or subject to their provisions?
- What are the implications for our understanding of regime effectiveness of the fact that individual governance systems regularly interact with one another both at the same level of social organization and across levels of social organization?

Next Steps Cont'd



- What consequences do international environmental regimes produce that go beyond impacts on the problems or issues that lead to their creation?

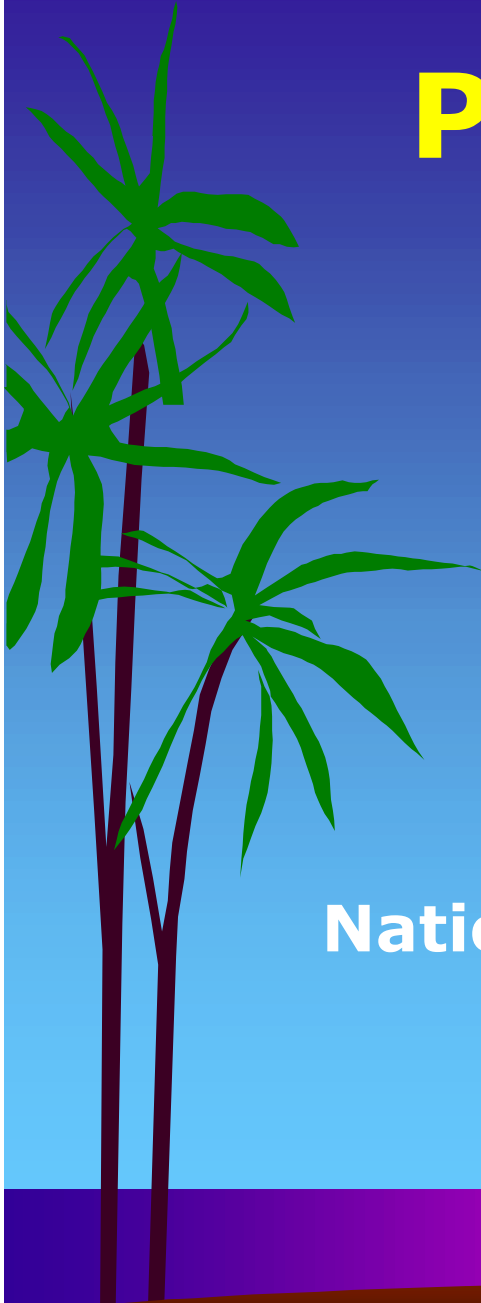
POVERTY AND THE ENVIRONMENT

**The Intellectual Legacy of
*Our Common Future***

**Calestous Juma
Kennedy School of Government
Harvard University**

**National Conference on Sustainable
Development**

Oslo, 6-7 March 2002



Living in darkness

- ▲ “Today we are the poorest, the most illiterate, the most backward, the most unhealthy, the most unenlightened, the most deprived, and the weakest of all the human race...”

-- President Pervez Musharraf, February 2002



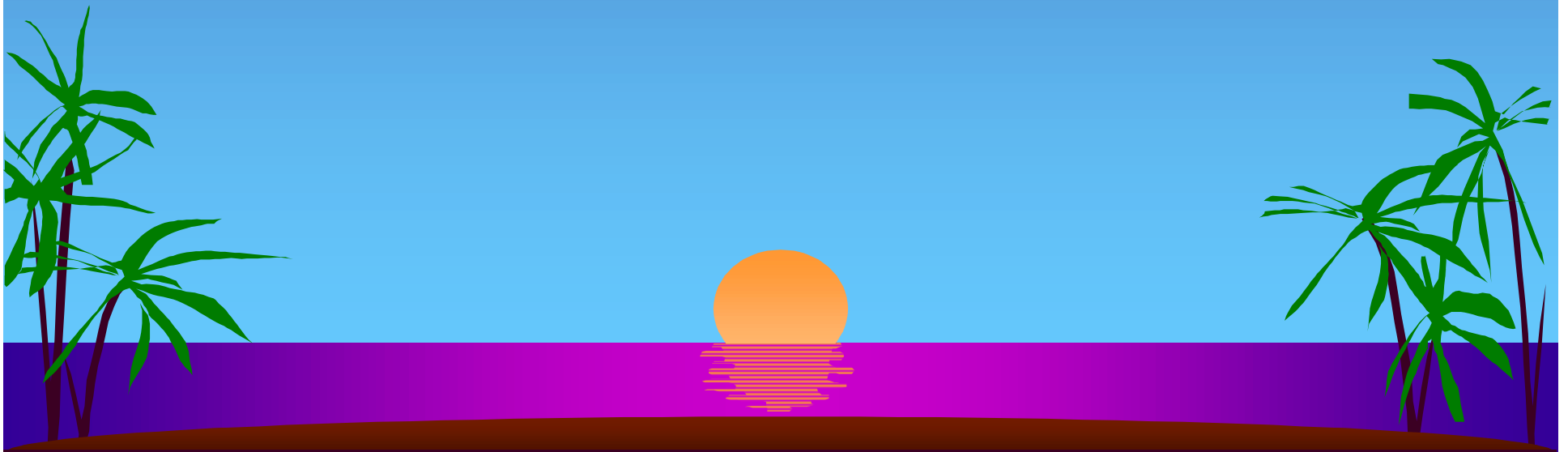
The sustainability challenge

The Johannesburg Summit

Institutional transition

Human capabilities: knowledge

Institutional adaptation



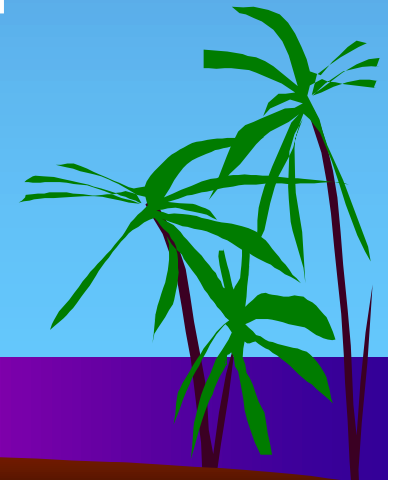
Organizing framework

“The challenge of finding sustainable development paths ought to provide the impetus--indeed the imperative--for a renewed search for multilateral solutions and a restructured international economic system of cooperation. The challenges cut across the divides of national sovereignty, of limited strategies for economic gain, and of separated disciplines of science,” p. x.



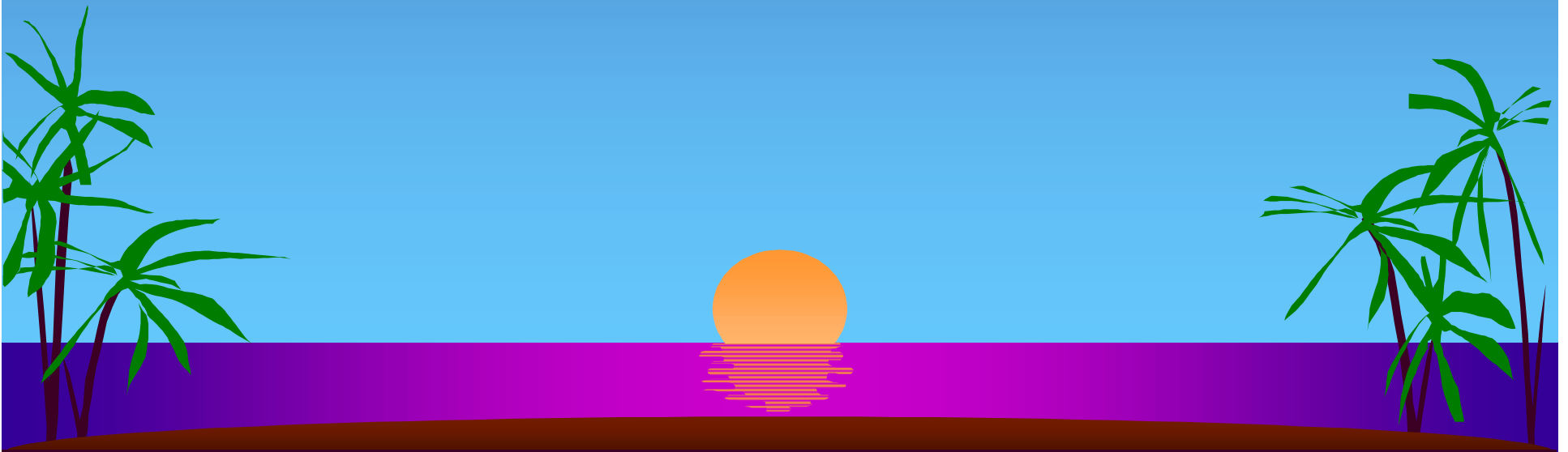
Poverty the environment

“Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequity,” p. 3.



Human potentialities

“...people can build a future that is more prosperous, more just and more secure,” p. 1.



Critical objectives

Reviving growth

Changing the quality of growth

Meeting essential needs

Ensuring a sustainable level of population

Conserving and enhancing the resource base

Reorienting technology and managing risks

Merging environment and economics



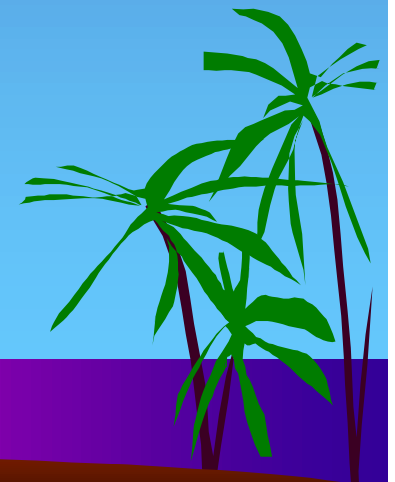
The technological base

“The fulfilment of all these tasks will require the reorientation of technology--the key link between humans and nature. First, the capacity of technological innovation needs to be greatly enhanced in developing countries so that they can respond more effectively to the challenges of sustainable development. Second, the orientation of technology development must be changed to pay greater attention to environmental factors,” p. 60.



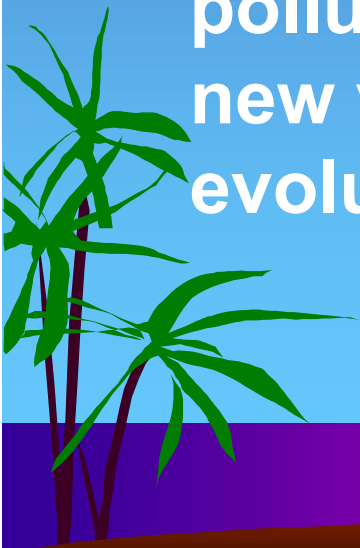
Technical ingenuity

“Human progress has always depended on our technical ingenuity and a capacity for cooperative action. These qualities have often been used constructively to achieve development and environmental progress,” p. 37.



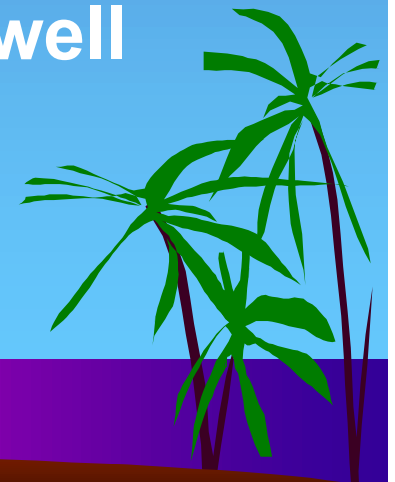
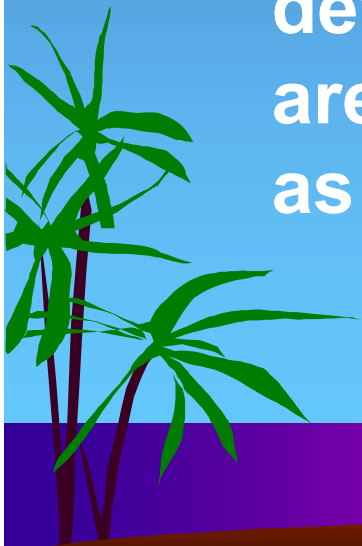
A mainspring of growth

“A mainspring of economic growth is new technology, and while this technology offers the potential for slowing the dangerously rapid consumption of finite resources, it also entails high risks, including new forms of pollution and the introduction to the planet of new variations of life forms that could change evolutionary pathways,” pp. 4-5.



The dynamics of change

“...sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs,” p. 9.



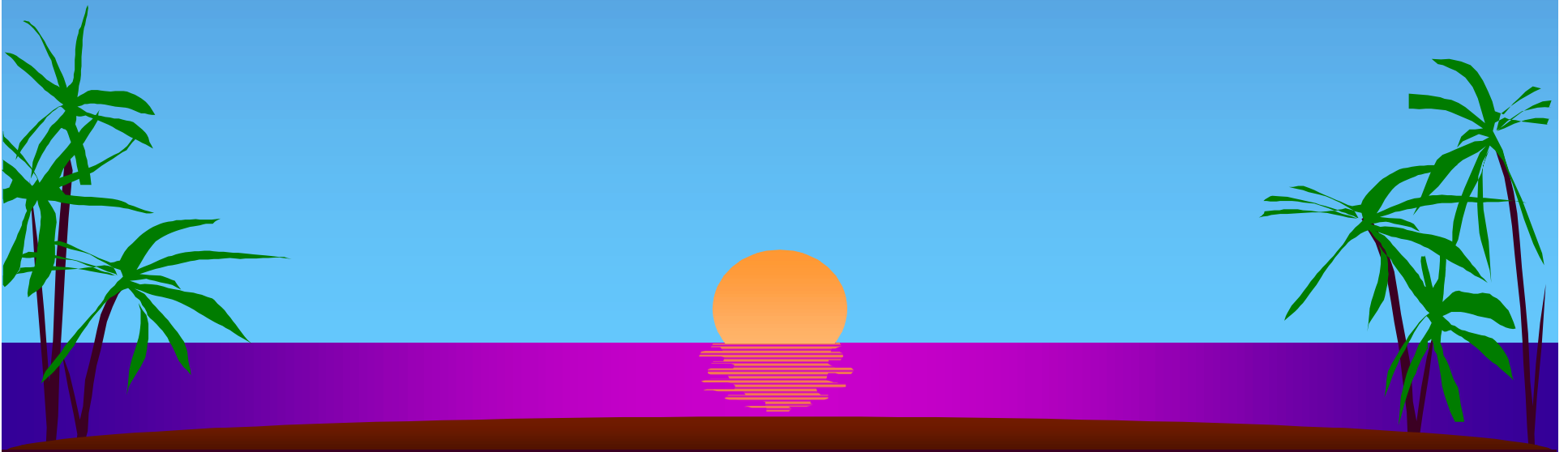
The new institutional ecology

From normative to operational

From principles to programs

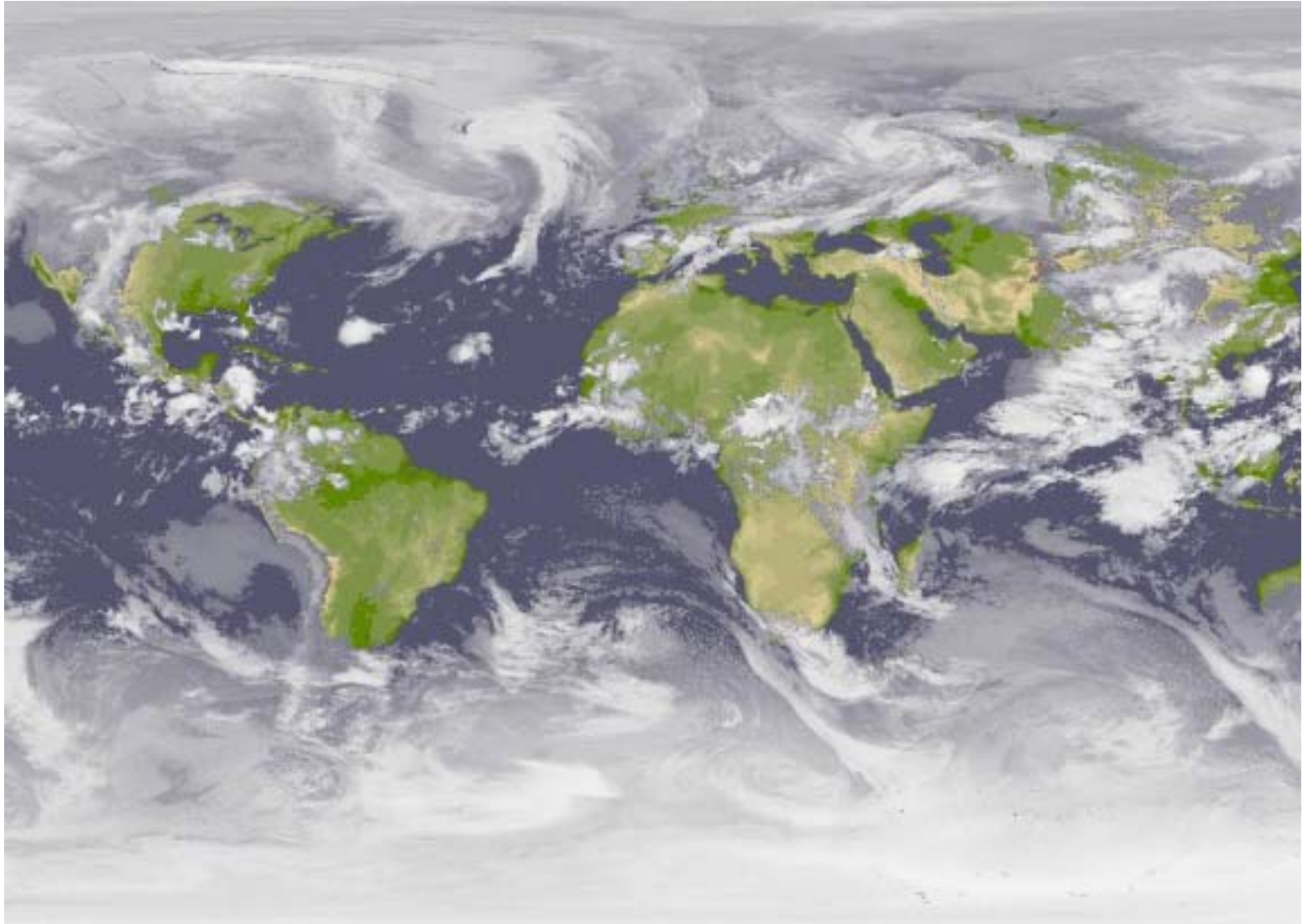
From global to national and local

Toward new institutional ecology



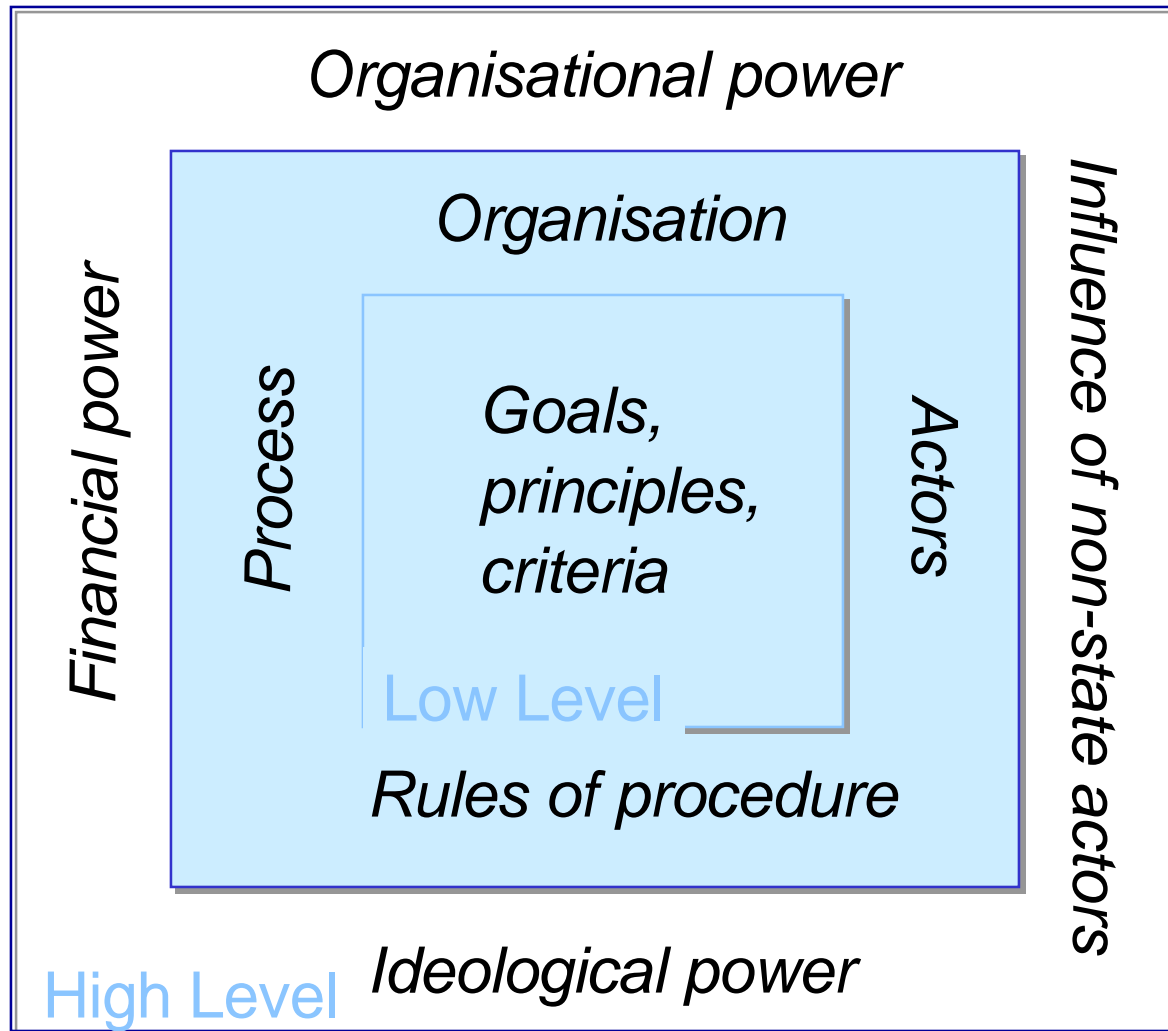
Environmental Treaties: Whose Natural Resources Are Protected?

Joyeeta Gupta



Predictions from theoretical perspectives

- **Realists/Neo-realists:** Powerful countries protect their own resources and those resources in other countries that affect their economic and political interests;
- **Neo-liberal institutionalists:** Issue-specific power and interests will differ from general power structures and may facilitate cooperation in benign issue areas.
- **Cognitive approaches:** Non-state actors may be a major countervailing power in determining whose resources are protected and how



Low level analysis

- Some regimes ostensibly protect resources of concern for:
 - all negotiating parties; e.g. climate change, ozone depletion
 - mostly developing countries: e.g. transboundary movement of wastes, biodiversity, CITES.

Low-Level Analysis

→ There is a trade-off between the extent to which the resource is protected and the extent to which such resource protection affects other:

- economic goals; e.g. Basel Convention, Montreal Protocol, Biodiversity;
- ecological goals: e.g. CITES: protecting developing countries from itself

The key issue in the climate change regime is thus:



→ How does one allocate emission rights?



Low-Level Analysis

- However, environmental regimes are incrementally reflecting the negotiated concerns of developing countries;
- But,
 - some concessions remain paper concessions;
 - developing countries are not often able to effectively articulate their concerns.

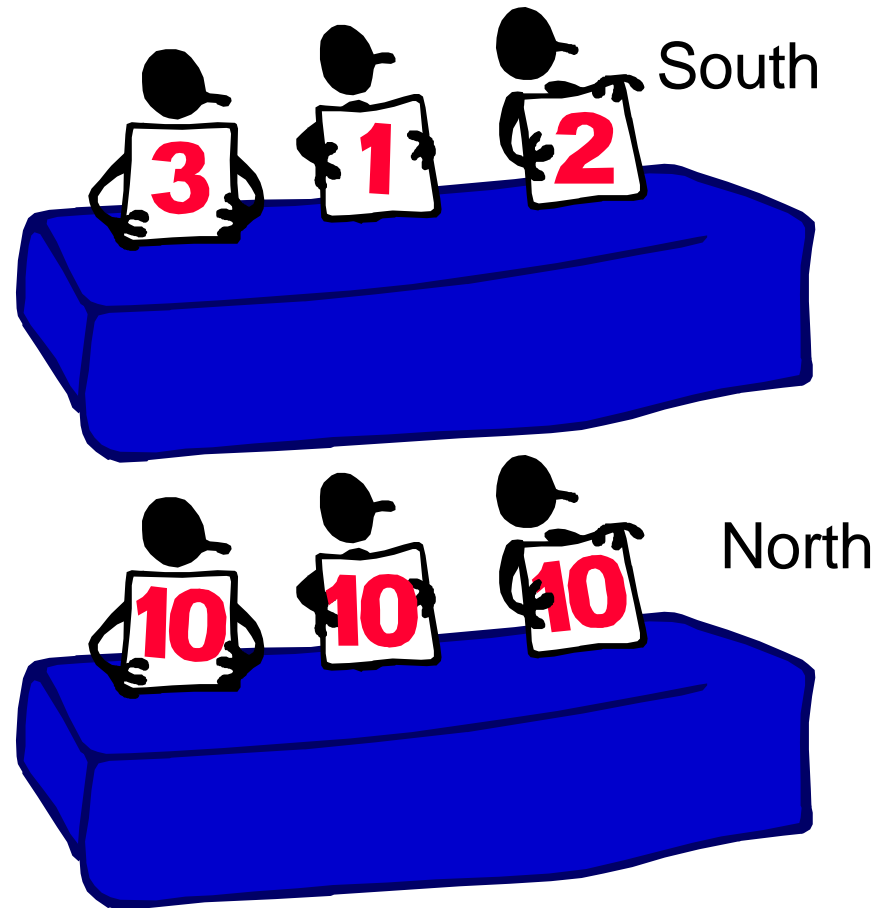


Middle level

- The trade-off and institutional learning depends on:
- the nature of the organisation where the negotiation takes place;
 - the rules of procedure that apply;
 - the actual processes that take place;
 - the participation of non-state actors; and
 - directional and instrumental leadership.

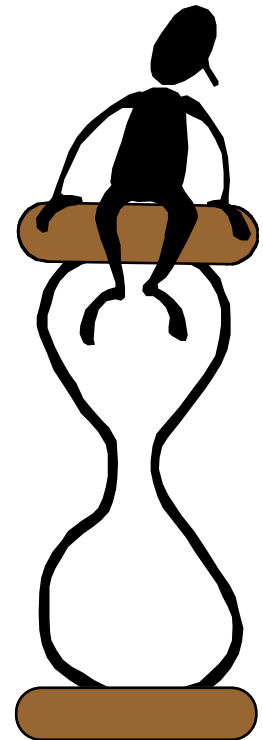
Middle level

- Hollow negotiating mandate;
- Handicapped coalition forming power;
- Handicapped negotiating power



Middle level

- Negotiators have a defensive strategy
 - they ad lib, don't propose, oppose, use proxy indicators of legitimacy, vacillate, see issues holistically, feel cheated by results, vulnerable to side-payments
- Have combined brittle def. strategy
 - They are confused between G77 and coalition approach, lack leadership, are susceptible to divide and rule through “voluntary”, side-payments, punishments,

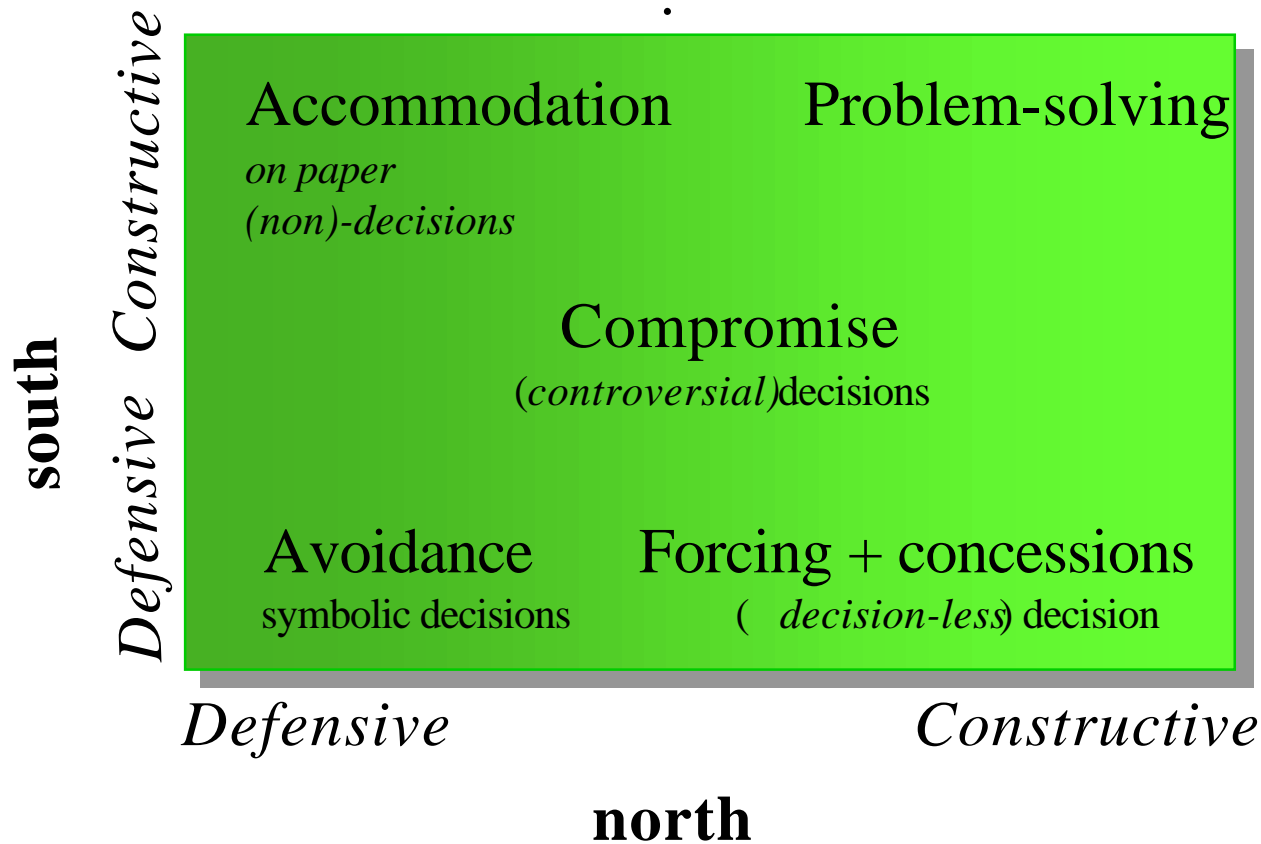


Middle level:

→ DC have threadbare strategies because of their

- Inability to participate in multiple formal/informal meetings;
- Inability to cover all issues;
- Inadequate support from their scientists and NGOs, etc.;
- Inability to deal with informal processes;
- Negotiators get tired;
- Extension of the negotiations;
- Influence on drafts and forum shopping;
- Perceived lack of transparency;

The negotiation space



High level

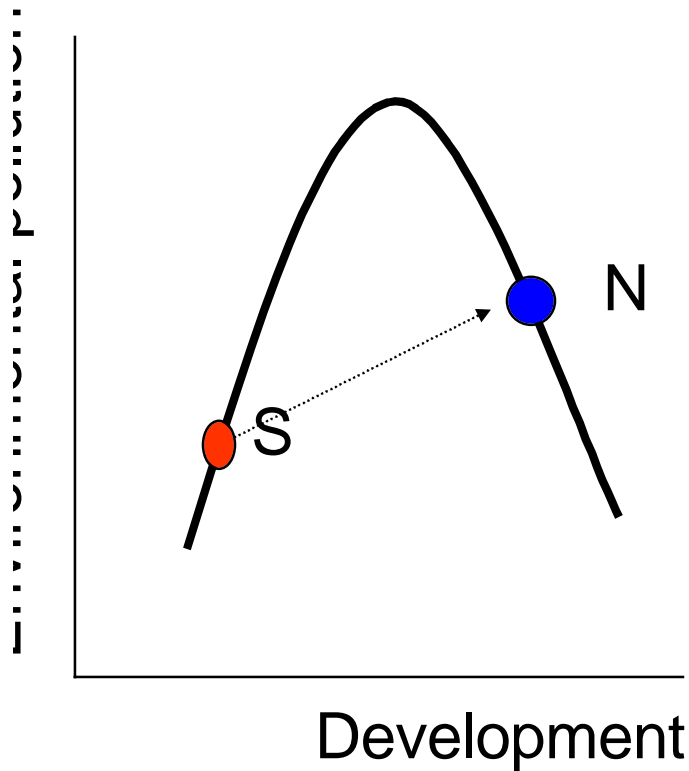
- Power determines which issues are ‘internationalised’; while certain domestic issues were ‘internationalised’ to justify foreign intervention; when these issues were accompanied by a price tag, the criteria for internationalising was revisited.
- Power structures ensures that critical domestic concerns in the developed world are not put on the table for scrutiny by the South:
 - temperate forestry;
 - production and consumption patterns;
 - the law of development and the implications for the North.

High Level

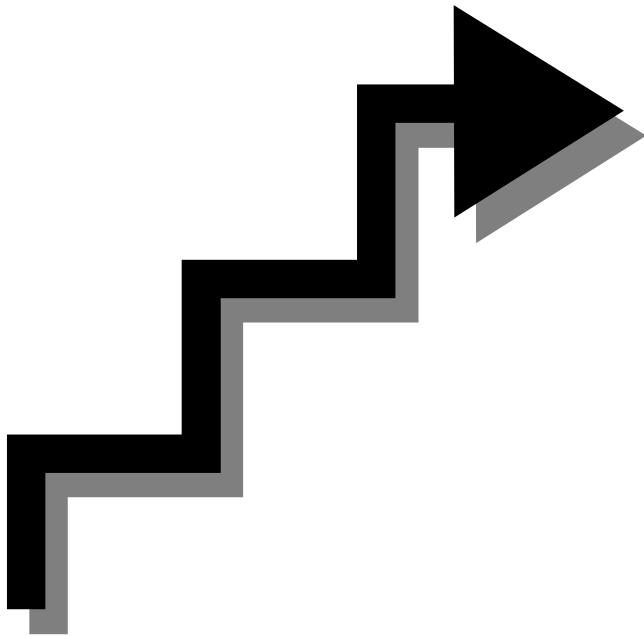
- Power structures push investment regimes further and environmental issues are being adjudicated here!
- Power structures push the sustainable development issue as the solution for developing countries

High level: S.D. → How to achieve sustainable development?

- Theory says -- by leap-frogging and learning from past mistakes! (Mistake optimism argument: problem defined in terms of technology, easy to correct incrementally, gives direction, confidence in North's leadership, reconfirms possibility of unchanged lifestyles for rich)



High level: Environment and development

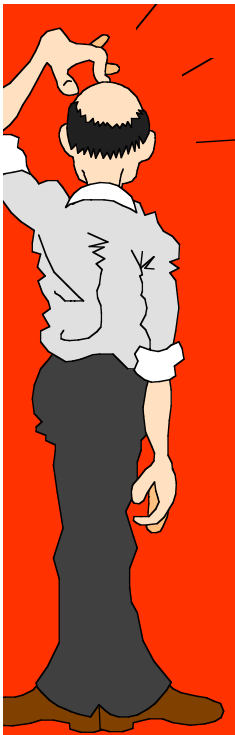


→ However:

- the inverted U curve does not yet hold for global problems,
- delinking may be followed by linking,
- imitating production and consumption patterns of the North might not solve the problem;
- avoiding mistakes is costly



High level: Southern Sustainability Dilemmas: Confusion without Fusion

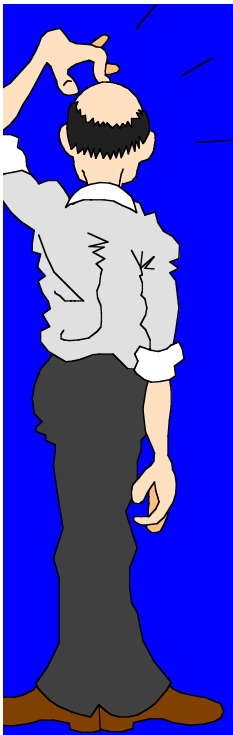


- Development: modernising without westernising?
- Poverty-I: surviving without squandering?
- Poverty-II: begging without mortgaging?
- Privatisation-empowering private sector to solve public problems
- Ecospace: equity without responsibility
- Economic: short-term gain without long-term loss?
- Negotiation-I: negotiate pragmatically without being corrupted?
- Negotiation-II empowering G-77 without being weakened



High Level:

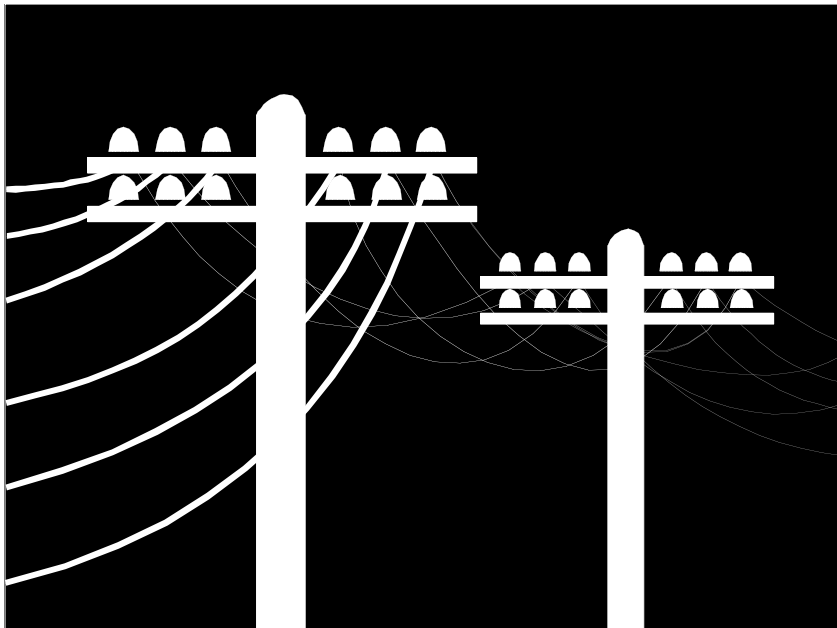
Northern Sustainability Dilemmas: Public Relations without Commitment



- Development: further development without sacrificing?
- Wealth - 1: spending without squandering?
- Wealth - 2: assisting without compensating?
- Wealth - 3: polluting without paying?
- Privatization: empowering private sector to solve public problems
- Ecospace: property rights or human rights
- Economic: short-term gain without long-term loss?
- Negotiation-I: negotiate pragmatically without being committed?



The highest level: The absence of the polluter pays principle



- The polluter pays
- The money is used to compensate and/or clean up the pollution
- Adopted by the EU, ECE, OECD
- Not adopted at international level



High Level - Globalisation

→ Leads to:

- Media coverage
- Explosion of FDI & trade
- World wide web
- Integrated financial markets
- Common governance system
 - greater wealth for all

→ Or:

- Closed markets
- Disempowerment
- Debt
- Unequal treaties
- Marginalisation
- Dependence



Global expenditures and priorities

| | |
|---------------|--------|
| •World Bank - | \$21 B |
| •UNDP - | 2 B |
| •UNEP - | 242 M |
| •UNCED - | 625 B |
| •GEF - | 500 M |

| | |
|------------------|-------|
| •Basic education | 6 B |
| •Cosmetics USA | 8 B |
| •Water/san. | 9 B |
| •Icecream in EU | 11 B |
| •Repro. health | 12 B |
| •Military | 780 B |



Conclusion

- International treaties are legal, but not necessarily legislative or legitimate;
- HL: Structural power determines which issues reach which forum unless there are countervailing powers.
- ML: Issue-related negotiation power determines how and issue is negotiated unless there are countervailing powers or leadership.
- LL: Issue-related power may be more significant and there is potential for cooperation in benign issues.

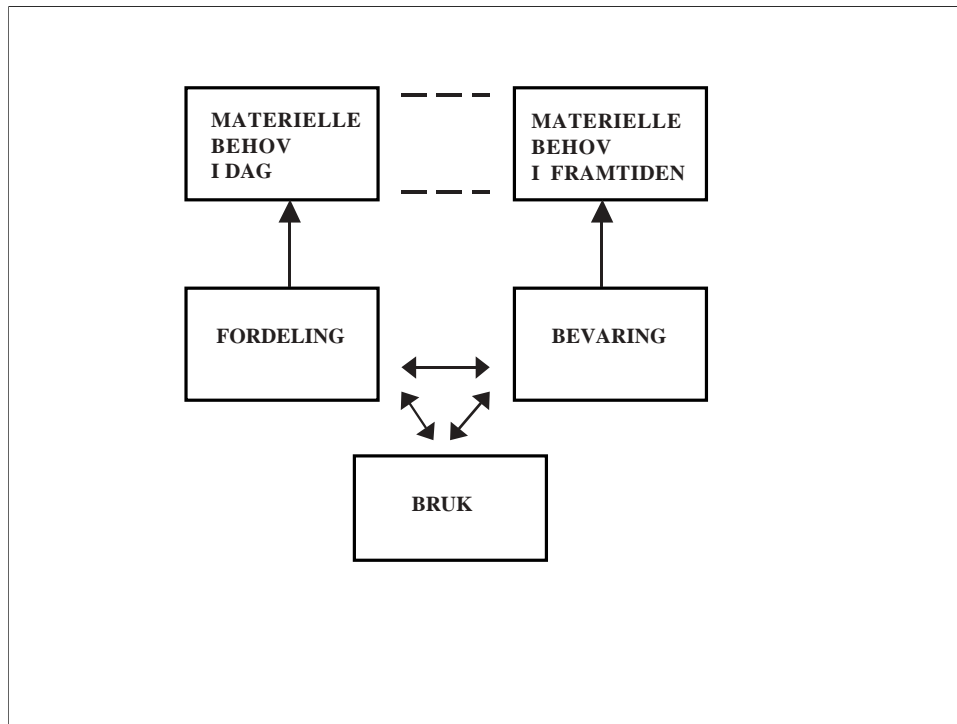
Conclusion: Environmental treaties

- deal with global resources (e.g. climate change);
- deal with local resources if common concern (- e.g. CITES);
- unless financial support is called for (e.g. GEF and desertification);
- without compromising on industrial interests in the North (e.g. Montreal Protocol, FCCC, Basel, etc);
- until the DCs negotiate effectively (incremental adjustment in the regime -- adaptation fund in climate change; prohibition of dumping wastes, etc.

Global constructions of local environmental management

Fra det lokale til det globale: Konstruksjoner om naturforvaltning

Denne presentasjonen skal handle om forhold mellom lokale og globale nivåer, men i et litt videre og annerledes perspektiv når det gjelder globale forhold enn mere direkte fokus på internasjonale avtaler.



Først et raskt blikk på bærekraftig utvikling. I følge Brundtlandkommisjonens rapport, skal bærekraftig utvikling som kjent imøtekomme ”dagens behov uten å ødelegge mulighetene for at kommende generasjoner skal få dekket sine behov”. Her er det med andre ord to målsettinger.

Også kan vi skille mellom tre aspekter av forvaltning av naturressurser, nemlig bruk, og bevaring, og fordeling.

Så kan vi tenke oss en forvaltning der disse tre aspektene til sammen danner mulighetene for å nå de to overordnede målsettingene relatert til dagens og framtidens behov.

Dette vil for det første innebære at naturressursene brukes i dag blant annet til å produsere mat og medisiner;

Og for det andre må bruken ikke gå på bekostning av en bevaring av mulighetene for en tilsvarende framtidig bruk;

Og for det tredje, må inntekter og utgifter fra dagens bruk og bevaring fordeles på en måte som ivaretar de fattiges behov.

På et overordnet og abstrakt nivå tror jeg de fleste av oss kan slutte seg til slike målsettinger. Men i det man begynner å spesifisere og bli litt konkret, så kan vi spore store forskjeller i betraktninger - om hvordan verden ser ut og hvilke handlinger som er ønskelige.

Diskurs

- **En forståelse av et fenomen som deles av flere;**
- **Fellestrekk**
 - **innhold**
 - **uttrykksmåter (narrativer, metaforer)**

I det følgende vil jeg skissere opp noen grupper av diskurser om forvaltning av naturressurser.

- Først en overordnet definisjon av diskurs slik ordet vanligvis benyttes i samfunnsvitenskaplig diskursanalyse nå for tiden:

Diskurs er her ikke det samme som diskusjon eller samtale, men derimot en forståelse av et fenomen som deles av flere. Dette fenomenet kan være lite eller stort, og betraktningene om det kan være delt av en liten eller stor gruppe mennesker på lokalt eller nasjonalt nivå, internasjonalt eller endog globalt nivå. Diskursen produseres og reproduseres og omdannes av aktører ved skriftlige og muntlige uttrykk som har visse fellestrekk med hensyn til både innhold og uttrykksmåter. Når det gjelder uttrykksmåter, kan man ofte finne igjen bruken av spesielle metaforer, og også spesielle mønstre for hvordan det fortelles om relevante hendelser, noe som man kan kalle metanarrativer.

Ledende diskurser på det globale nivået som handler om forvaltning av naturressurser, influerer internasjonale begivenheter og forhandlinger, samtidig som slike begivenheter også kan bidra til endringer av diskursene. Diskursene skaper grunnlag for fortolkninger, og de fungerer som veivisere i forhold til beslutninger om komplekse spørsmål. Til en viss grad kan dette være positivt og muliggjøre viktig handling. Samtidig ser vi ofte at aktører - til og med mot bedre viten - tviholder på den vidunderlig enkle verden som diskursene og narrativene skaper. Og dette kan gå utover målsettinger man ellers måtte ha i forhold til bedring av vilkår for fattigfolk i dag og mulighetene for bevaring av naturressursene for fremtidig nytte. Dette kan være globale diskurser, og fokuset for forenklingene er gjerne lokale virkeligheter, og blant produsentene finner vi blant annet aktører så som byråkrater, media og frivillige organisasjoner, og vi forskere har det kanskje altfor ofte med å kaste oss på, i stedet for å være den kritiske motvekten vi alltid burde være.

- Svarstad, H. 2000: “Reciprocity, biopiracy, heroes, villains and victims”. In: Svarstad, H. and S.S. Dhillon (red.): *Responding to Bioprospecting. From Biodiversity in the South to Medicines in the North*. Oslo: Spartacus.
- Adger, W.N., T.A. Benjaminsen, K. Brown & H. Svarstad 2001. Advancing a political ecology of global environmental discourses. *Development & Change* no. 4, vol. 32:681-715.

Jeg vil skissere opp fire grupper av diskurser om forvaltning av naturressurser. Det er selvfølgelig ikke noe tid her til utdypninger, men jeg kan nevne at presentasjonen tar utgangspunkt i forskning som er på gang og under publisering, og her er et par eksempler på allerede publiserte ting. Min egen forskning fokuserer hovedsakelig på biomangfold og på bioprospektering - som er en måte biomangfoldet benyttes til å finne fram til nye produkter, blant annet medisiner. Artikkelen i *Development and Change* presenterer og sammenligner diskurser innen fire temaområder som forfatterne har lange forskningserfaringer med, og ved siden av biomangfold er dette forørkning, avskoging og klimaendringer.

1. Fornektelsesdiskurser

- Omfang eller alvor av miljø saker betviles
- Nødvendighet eller omfang av bevaring betviles

Den første gruppen består av noe vi kan kalle fornektelsesdiskurser. Her betviles omfang eller alvor av spesielle miljø saker, og nødvendighet eller omfang av bevaring betviles.

De fleste i dag oppfatter dette som et tilbakelagt tankestadium - behovet for bevaring i de fleste sammenhenger tas nærmest for gitt.

Likevel finnes det viktige eksempler på tilfeller der forskere har solide resultater som avviser nødvendigheten av vernetiltak. Et eksempel er spørsmålet om forørkning. Blant annet norske forskere som studerer dette inngående i Sahel setter spørsmålstegn ved en standard oppfatning om at det skjer forørkning ved lokal bruk av naturressursene.

I Norge melder likevel media stadig om det motsatte. Barna våre lærer om ørkenspredningen på skolen, og Norge jobber aktivt i internasjonale sammenhenger - som f.eks. i forhold til den internasjonale forørkningskonvensjonen -for å få bukt med ”problemet”, bl.a. i Sahel.

2. Preserveringsdiskurser

Den andre gruppen av diskurser jeg vil nevne er preserveringsdiskurser. Disse kan man i dag finne noen spredte eksempler på, men de hadde helt klart bedre tider blant naturvernere for noen tiår siden da det var legitimt å konsentrere seg om en målsetting om bevaring av arter og arealer uten å ofre noe særlig tanke på fattigfolk i området som kunne bli hardt rammet av bruksrestriksjoner - uten noen former for kompensasjon. Ikke minst når det gjelder u-land har preserveringsdiskurser tidligere stått sterkt - i bevisstheten til aktører fra rike land i Nord.

Jeg kommer ikke på et eneste eksempel på saker der en preserveringsfortolkning av en sak vil være på sin plass, og jeg tror ikke faren er stor for at preserveringsdiskurser skal prege norske bidrag til Johannesburg-prosessen.

3. Globale win-win diskurser

- Partnerskap mellom lokale og eksterne aktører skal sikre bærekraftig forvaltning
- Eks: Bioprospektering win-win

For det tredje har vi en gruppe win-win diskurser der alle de tre nevnte forvaltningsaspektene - bruk, bevaring og fordeling - skal tas hånd om utfra partnerskap mellom lokale og eksterne aktører, og der man både kan finne verneinteresser og økonomiske aktører blant de eksterne aktørene.

Et eksempel her er en diskurs om bioprospektering som står i et nært forhold til Konvensjonen om biologisk mangfold.

Biokonvensjonens tre målsettinger er bevaring av biomangfold, bærekraftig bruk av dens komponenter og rettferdig fordeling av gevinstene fra bruken av genressurser.

Bioprospektering er en virksomhet der for eksempel farmasøytiske selskaper utvikler moderne medisiner med utgangspunkt i innsamlinger av medisinplanter og tradisjonelle kunnskaper relatert til disse. Dette er en virksomhet som fikk en betydelig oppsving på 1990-tallet, og tropiske områder av verden har vært spesielt ettertraktet på grunn av stort biomangfold. Jeg har studert hvordan bioprospektering er blitt gjenstand for framveksten av to diskurser, der den ene altså er en win-win diskurs med forståelsen av at bioprospektering kan skape gevinster for bevaring av biomangfold, for utviklingsformål i u-land, gevinster til lokale fattigfolk, og for pasientgrupper som får utviklet nye medisiner, og selvfølgelig skal virksomheten skape gevinster for de involverte selskapene.

Et vilkår for å sikre slike gunstige situasjoner med gevinstfordeling er at institusjonelle rammer for dette blir etablert i kildelandene for biomangfoldet. Dette er helt i tråd med biokonvensjonen og basert på et kompromiss mellom selskapers ønsker om relatert patentering og mulighetene for inntekter til kildelandene.

Og gjennom de siste årene har det blitt produsert en god del narrativer - først og fremst av bioprospektørene selv - som viser konkrete eksempler på hvordan bioprospektering utføres på win-win måter.

4. Populismediskurser

- Intervensjoner av eksterne aktører anses som negative
- Eks: Genrøveridiskursen

Til slutt har vi en gruppe av populismediskurser, og her finner vi blant annet en genrøveridiskurs, der bioprospektering fortolkes som en alvorlig trussel med utbytting av u-land og fattigfolk i u-land. Hvis man abonnerer på de riktige e-maillistene fra enkelte NGOer, så mottar man stadig vekk nye fortellinger med eksempler på dette. Her er det også snakk om narrativer skodd over samme lest, men i dette tilfellet handler det ikke om win-win, men tvert imot om fattigfolk som utbyttes av genrøverne fra Nord, og som regel henvises det til patentering som noe som per definisjon bidrar til utbyttingen.

Felles for flere populismediskurser er at intervensjoner av eksterne aktører ofte avvises kategorisk. Og dette bygger delvis på relativt nye og etter min mening sunne erkjennelser av at lokale aktører ofte har svært gode evner til selv å forvalte naturressursene sine på hensiktsmessige måter, dersom de får mulighet til det.

Min erfaring med forskning om bioprospektering er at vi her har et tema med voldsomt sterke meninger og en stor produksjon av narrativer etter samme mønster, samtidig som vi har svært få uavhengige og kritiske analyser av måter bioprospekteringen skjer på lokalt nivå. Og de studiene jeg selv har deltatt i, gir grunnlag for konklusjoner som avviker vesentlig fra genrøveridiskursen, og konklusjonene er heller ikke så rosenrøde som et win-win glansbilde.

Og jeg har sett med en viss forbløffelse på hvordan egne forskningsresultater om bioprospekterings-case i Norge har blitt utnyttet som råstoff for konstruksjon av genrøverinarrativ. Selv om forskningsresultatene slett ikke pekte i den retning, var det slik det ble framstilt - ikke bare i NGO-sammenheng, men også i medier som Dagsrevyen og Aftenposten.

Diskurser, internasjonale avtaler og lokale situasjoner

Man kan tenke seg flere viktige relasjoner mellom diskurser, internasjonale avtaler og lokale situasjoner. Og det virker vanskelig å tenke seg tilfeller med påvirkninger mellom internasjonale avtaler og lokale situasjoner der diskurser ikke har stor betydning.

Jeg vil eksemplifisere én type relasjoner - igjen med referanse til biokonvensjonen og bioprospektering. Biokonvensjonen skaper en grunnleggende ramme for avtaler mellom bioprospektører og kildeland, med formuleringer om at tilgang til genressurser skal skje med utgangspunkt i informasjon og betaling på vilkår som partene blir enige om.

Men i dag har denne virksomheten fått alvorlige skudd for baugen. En av de viktigste årsakene til det, er at ethvert forsøk på bioprospektering med lokal fordeling alltid utsettes for omformuleringer utfra et genrøverinarrativ. Dette reduserer selskapers interesse i denne typen forskning og utvikling, og lokale besittere av biomangfold og kunnskaper overlates til seg selv - og sin fattigdom. Her er det med andre ord en diskurs som produseres av velmenende solidaritetsaktivister i Nord som bidrar til mangelen av innfrielsen av det håpet mange for 10 år siden hadde til at Biokonvensjonen skulle medføre positive inntekter til genrike u-land.

Å bringe inn et fokus på diskurser i forhold til internasjonale avtaler og lokale situasjoner tror jeg er svært viktig, og her burde det absolutt forskes mer.

Et lite råd på veien til Johannesburg



Damene på bildet er på vei noe sted - men neppe til konferansen i Johannesburg. Men det er mange andre som - med en liten omskrivning av et gammelt slagord - for tiden forsøker å ”tenke lokalt og reise globalt”.

Om jeg skulle gi et aldri så lite råd til de i forsamlingen som skal bidra i prosessen fram mot Johannesburg - og videre også - så vil det være å stå fast ved en forankring i den overordnede tanken om de to nevnte målsettingene for bærekraftig utvikling og betydningen av en forvaltning av naturressurser der det i ulike saker foretas fornuftige avveininger og grep i forhold til bruk, bevaring og fordeling.

Dette innebærer at ulike diskurser må vurderes kritisk, samtidig som holdbare elementer fra flere av dem gjerne bør kunne settes sammen på nye måter. I noen tilfeller vil tankemåter fra fornektelsesdiskurser være på sin plass, andre ganger vil det være viktig å jobbe for etablering av rammer for hensiktsmessige partnerskap mellom ulike interesser slik det ivres for i win-win diskursene, mens av og til er det nødvendig å fokusere på problematiske aspekter ved slike partnerskap.

Videre synes jeg norsk media helt klart har store forbedringspotensialer i forhold til å belyse miljø- og utviklingssaker på måter som stiller spørsmålstegn ved rådende diskurser og narrativer;

Jeg synes det norske statsapparatet likeledes har store muligheter til å bli bedre i å ta inn over seg nye forskningsresultater som peker i andre retninger enn byråkratene hittil har sett og satset på;

Og med en forankring i forskersamfunnet, vil jeg til slutt si at jeg håper på bedre vilkår for kritisk forskning om miljø- og utviklingsspørsmål. Det tror jeg alle er tjent med.

Session 3: Is the relationship between poverty, development and the environment independent of the type of environmental problem?

Terje Tvedt, Senter for utviklingsstudier, Universitetet i Bergen

Hvordan har utviklingen de senere år påvirket vannressursene, og i hvilken grad avgjør tilgangen på rent vann den økonomiske og sosiale utviklingen.

ABSTRACT

Vannspørsmålet var et oversett problem i Brundtland-kommisjonens rapport. Slik sett: rapporten et produkt av sin tid og den dominerende »Vannblindheten» som eksisterte da.

På 1990-tallet snakket det internasjonale bistandssystemet om faren for vannkriger. Det var på alles lepper. Årsak: Over halvparten av verdens mennesker lever i internasjonale vassdrag. Vannmengden er konstant, og mange land hadde vannknapphet som en viktig utviklingsbarriere.

På slutten av 1990-tallet og nå snakker det internasjonale bistandssystemet om vann som en »kilde til samarbeid», som det båndet som kan bringe ellers stridende parter sammen.

Dominerende perspektiver kommer og går. For å forstå vannets betydning i utviklingsprosesser er det derfor nødvendig å legge an et langt historisk perspektiv. Det er eneste måten å etablere distanse til herskende perspektiver på.

Innlegget vil beskrive hvordan samfunns utvikling og revolusjonære endringer i vannutnyttelse henger sammen for å sette »scenen» for dagens og morgendagens utvikling.

Innlegget vil presentere noe data over vannsituasjonen for verdens fattige og diskutere det i forhold til »pricing of water»-politikken, som er blitt et dominerende credo i den internasjonale diskurs om vann og vannhusholdning.

Innlegget vil også diskutere vann og »eiendomsspørsmålet». Privatisering/et offentlig gode. Vil »kampen mot terrorismen» influere på vannspørsmålets globale betydning?

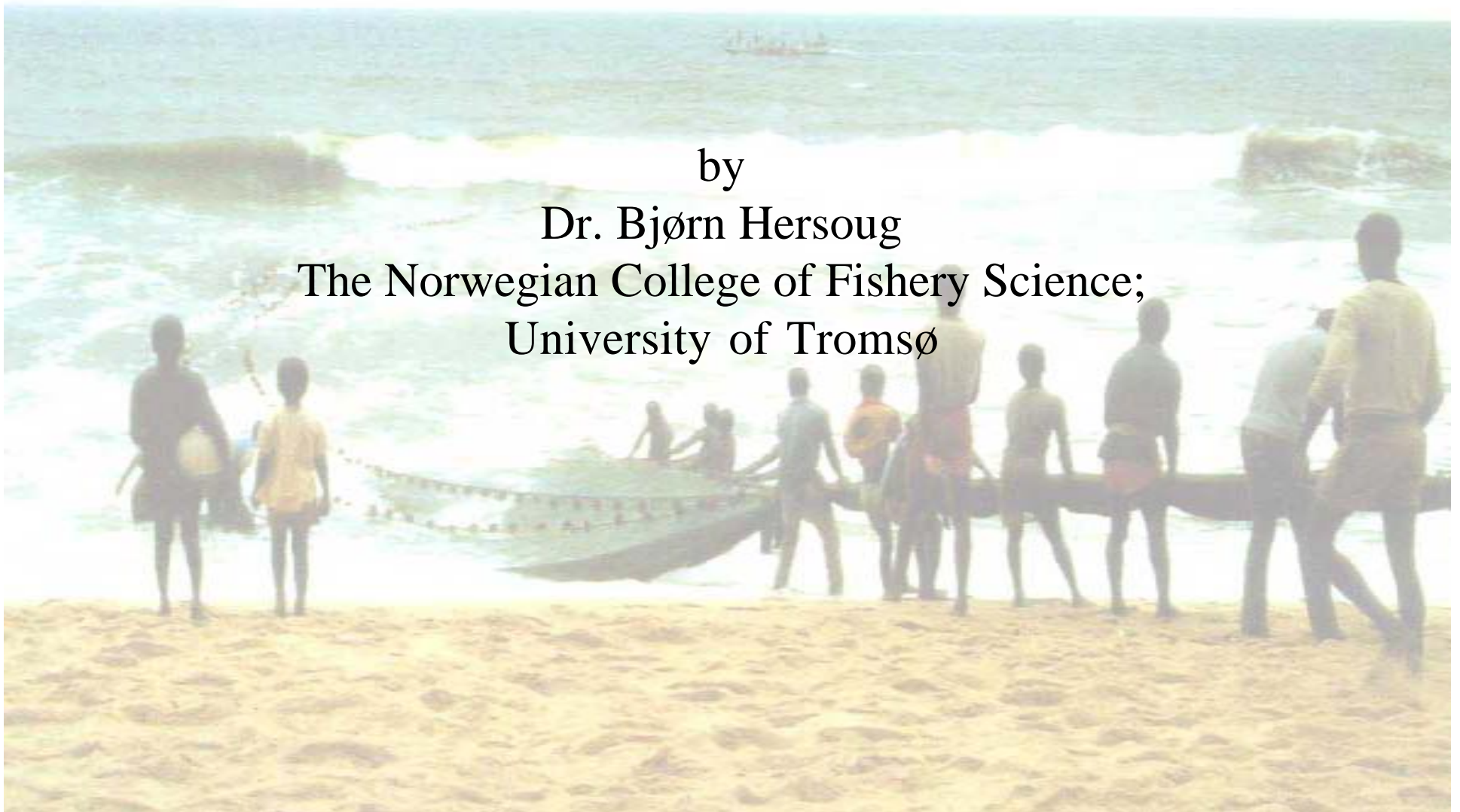
Til slutt vil jeg diskutere ny, revolusjonerende teknologi og vannspørsmålet.

Are sustainable fisheries possible?

by

Dr. Bjørn Hersoug

The Norwegian College of Fishery Science;
University of Tromsø



Are sustainable fisheries possible?

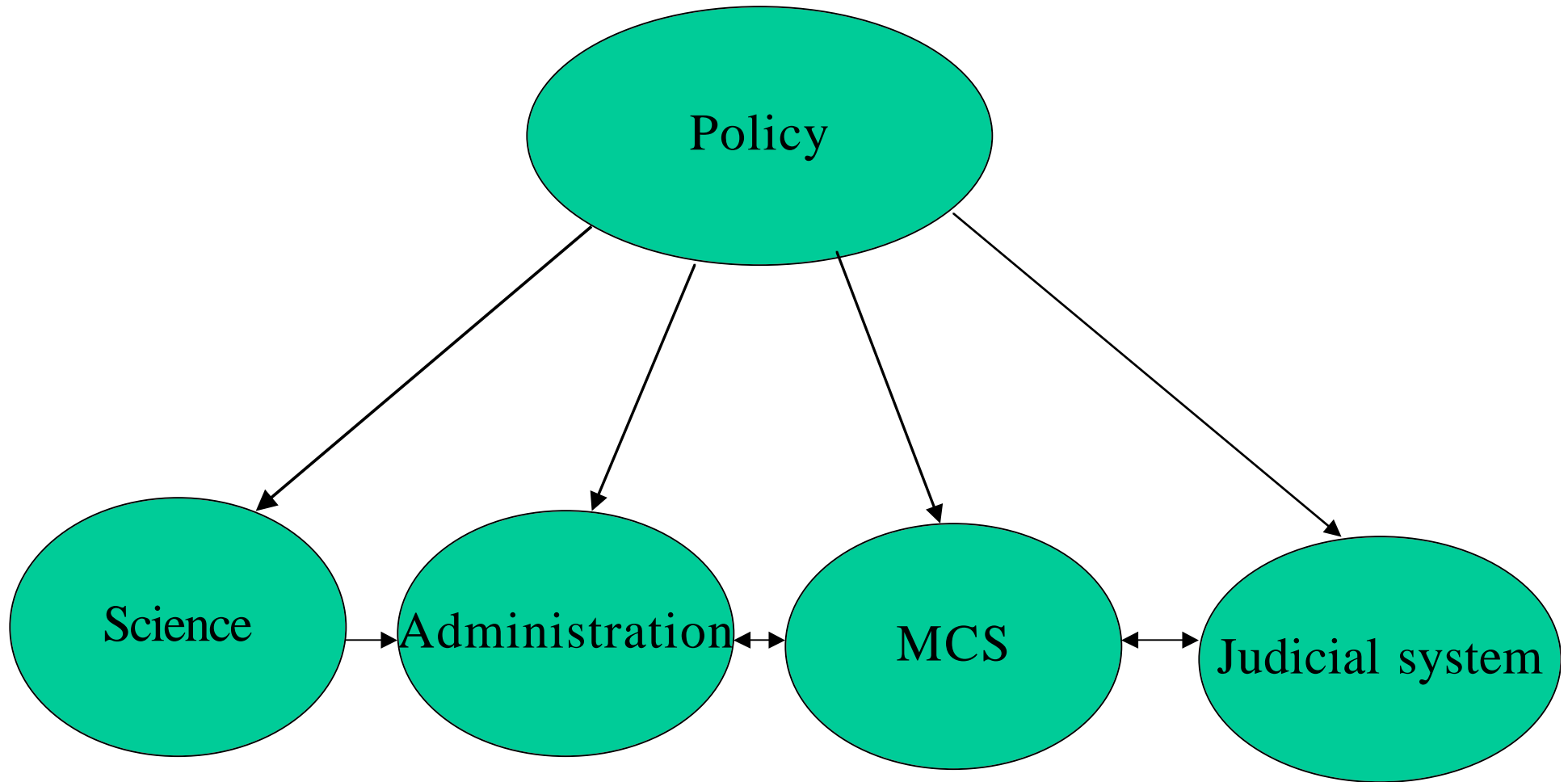
- Looking at FAO's global statistics, the answer is no! The worst resource crashes have been in the developed world!
- But we need to differentiate fisheries:
inland/marine, small-scale/industrial,
developing/developed
countries
- What type of "sustainability"? Biological, economic, social, administrative??
- What type of requirements: "survive", optimum (MSY, MEY, MScY) or "pretty good yield"?
- What time perspective?

Sustainable fisheries in

developed countries possible if:

- Sensible trade-offs are made within policy (biology, economy, social goals, administrative costs)
- Good scientific input (models, data, presentation)
- Optimal mix of management measures, including TACs and distribution.
- Operational monitoring, control and surveillance
- Effective judicial system
- Conclusion: heavy requirements on the fisheries system, few countries in a position to fulfill
- If Norway =a world champion, competition=lousy!

The fisheries system



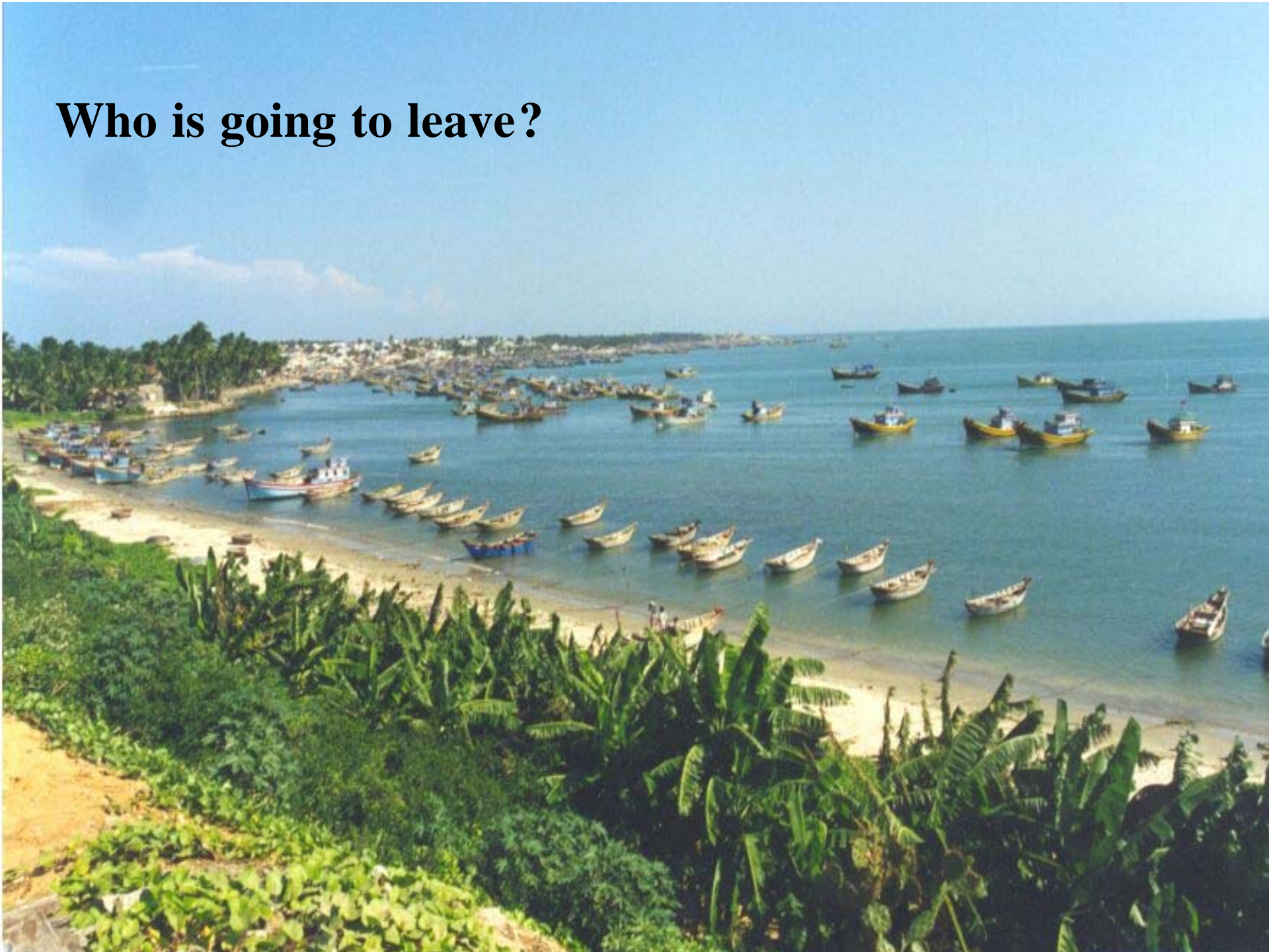
What about developing countries?

- One approach: *export of Western management institutions* (research, management, MCS, judiciary)
- Highly successful in Namibia based on Norwegian assistance (+EU, Japan, Iceland, Denmark etc)
- BUT: Namibia special case: two harbours, industrialised fisheries, hardly any small-scale fishers, few people, export oriented, good infrastructure, limited corruption etc
- NB! Based on a resource tax (10-15% of landed value) paid by all operators for the privilege of using national resources

For other countries: export of Western management system can be detrimental

- Do not have the prerequisites for such management (resources, organisation, literacy)
- Case: Vietnam, overfishing, declining catches inshore, limited potential offshore, hardly access control, fishing = employer of last resort
- Have to find simpler and more effective systems! (we have not found them yet!)
- The optimal mix of state, market and community
- Co-management? Community management? ITQs?

Who is going to leave?



Relationship poverty – sustainability?

- Classic: Lake Malawi: population pressure, new markets, new technology, few alternatives, relatively open access (not as fishers but as crew).
- Result: decreasing catches, fishing on lower trophic levels, reduced bio-diversity, ”trapped in fishing”
- Short term considerations: survive tomorrow
- Limited entry means regulating people to death!
- Solution: more diversification, but how?
- Solution II: co-management, but with whom?
- No easy way out!

What is the challenge?

- Changes in international approaches to fisheries management
- From Exploitation to
- Optimisation to
- Sustainable use to
- Precautionary approach to
- Ecosystem approach

- Institutional: from top-down to participatory

- Present mainstream: participatory, precautionary ecosystem based fisheries management

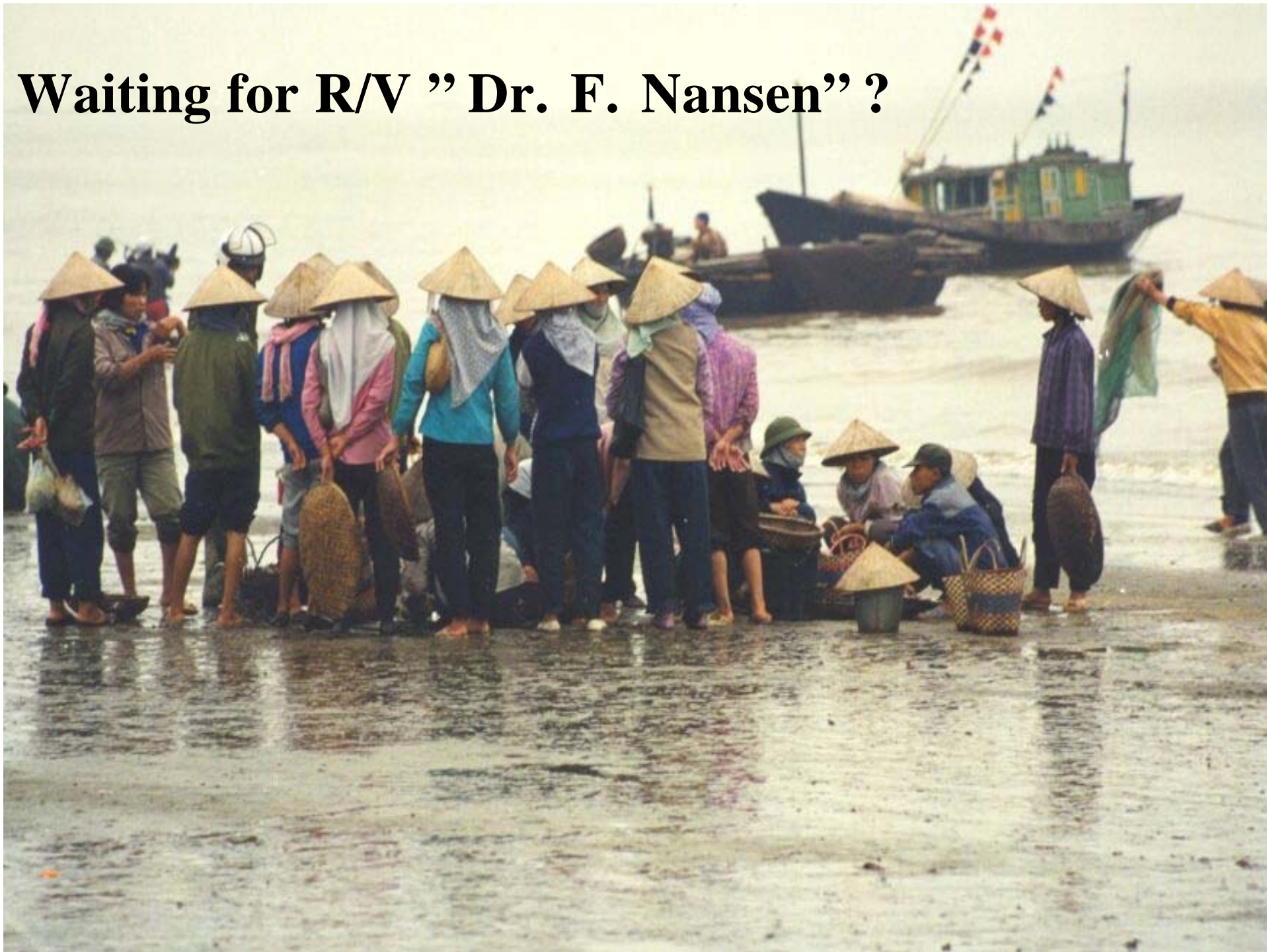
Implications for developing countries

- Weak institutions (policy making, knowledge production, implementation incl MCS)
- Both small and large scale fisheries
- How can DC's develop participatory, precautionary ecosystem based fisheries management integrating societal concerns on both large and small scale given the weak institutions?
- New (and not yet identified) approaches are necessary

Where can Norway contribute?

- The Nansen Programme:
- R/V "Dr. F. Nansen" operated by IMR (Bergen) under FAO flag , paid by NORAD
- Start 1973 resource assessment and trial fishing world wide (1973-93: 50 countries)
- 1994 new vessel+larger program onshore based on institution building
- 1994- 2003: South West Africa + NW Africa
- Now available for new initiatives!
- A Norwegian effort to follow-up on the implications of sustainable resource management??

Waiting for R/V "Dr. F. Nansen" ?



How does the level of economic development of a region influence the climate? What will happen if all reach the western standard of living?

Knut H. Alfsen
Research Director
Institute for Energy Technology (IFE)
6.3.2002

1. Introduction

The title I have been given for this presentation contains two questions. In addition a third question is posed in the title of this session. Thus, in the presentation I will briefly address the following:

1. How does the level of economic development of a region influence the climate?
2. What will happen if all reach the western standard of living?
3. Is the relationship between poverty, development and the environment independent of the type of environmental problem?

However, before addressing these questions it is appropriate to say a few words about the climate problem. It is now more or less accepted that we observe climate change caused by human made (anthropogenic) emission of greenhouse gases. Climate has always been changing as illustrated for instance in Figure 1 which shows a variable but generally downward sloping trend in the annual temperature over the northern hemisphere over the last thousand years. This trend was sharply broken in the last century when we saw two sharp temperature increases, one jump over the period from approximately 1910 to 1945, and the other starting around 1975. The first of these jumps most probably was caused by natural causes like a lack of volcanic activity and solar variation, while the last jump seems only to be explainable when we take anthropogenic greenhouse gas emission into account. The figure also illustrates likely development in temperature for several scenarios covering the next hundred years.

Figure 1 inserted about here

A couple of comments should be made in connection with Figure 1.

First, we can register a substantial amount of uncertainty (marked by the grey areas) associated with the future development. Still the projected changes are well outside what we have experienced over the last thousand years. Another comment is that the dramatic but smooth development in average temperatures depicted in Figure 1 does not really convey the nature of climate change. Conditions under climate change will of course vary between different regions but may also imply a substantial increase in the variability of climate change over time. Today we know that extremely rapid climate change has happened for natural reasons in prehistorically times. However since the last ice age 10.000 years ago climate change has been relatively slow. Thus, civilisation as we know it has not really experienced rapid climate change as nature by itself may generate. Perhaps the most serious threat of our man made forcing of the climate system is that we trigger such damaging rapid climate change.

We should also be aware of the great inertia of the climate system. This implies that whatever we do to emission of greenhouse gases today we are going to experience substantial climate

change the next couple of decades. These changes are already programmed into the climate system by our past emissions. These are illustrated in Figure 2.

Figure 2 inserted about here

The figure illustrates nicely the way in which the rich part of the world is responsible for the anthropogenic part of the climate change today. What is of course unfortunate and totally unsustainable is that the emission caused by the life style of the rich part of the world predominantly results in life threatening damages in the poorest part of the world.

With these remarks of an introductory nature, I now turn to the questions in the title.

2. How does the level of economic development of a region influence the climate?

A high standard of living is usually linked to an excessive level of per capita greenhouse gas emissions. The situation in 1990 is shown in Figure 3 and can be summarised by pointing out that approximately 1/4 of the population has close to 5/6 of total world income and are responsible for 2/3 of the CO₂ emission.

Figure 3 about here

However, the correlation between standard of living and emission level is not a simple (linear) one, neither is it a typical Environmental Kutznez curve with a single peak or hump. The relatively high CO₂ emissions from the countries with economies in transition (Soviet Union and the East European countries) were related to their use of very energy inefficient and polluting technology. It is also worth recalling that the GDP of the countries with economies in transition fell by around 45% during the 1990s, while their CO₂ emissions fell by 36%. Mechanically calculated this can be translated into a "cost of reduction" of close to 230\$/t CO₂ - certainly a very expensive way to reduce emissions. Thus, the message is certainly not that we all ought to be poor in order to "save the climate". The message is rather that the choice of technology matters as much if not more than the level of income in determining greenhouse gas emissions, although the two are not entirely unrelated.

3. What will happen if all reach the western standard of living?

This question begs the further question of what is meant by "the western standard of living". One interpretation is that it relates to the *current* per capita income level in the Western world. An alternative interpretation is that it relates to the *future* standard of living in our part of the world. We also need to discuss what constitutes significant or even dangerous climate change.

Unfortunately, what we can consider as "safe climate change" is highly uncertain. A conventional focus point has nevertheless been that we probably can tolerate a doubling of the CO₂ (equivalent) concentration level in the atmosphere at the end of this century compared to the pre-industrial level (corresponding to roughly 550 ppmv). This will imply an approximate increase in global mean temperature of some 2-3 degree C over the next 100 years. In order to stay below this level, the global emissions will have to peak near the middle of this century and be reduced compared to today's level near the end of the century, see Figure 4. Thus, given the development needs in the poor world, the message is that we cannot really tolerate the *current* western standard of living in the western world, and much less in an extended region including parts of the third world in the long run.

Figure 4 about here

On the other hand, future technological development may – if we are smart – imply that the *future* western standard of living is energy and emission efficient enough to accommodate the entire world population beneath a sustainable climatic roof when it comes to emission of greenhouse gases. The situation can be illustrated as in Figure 5 showing results from the IPCC Special Report on Emission Scenarios (SRES).

Figure 5 about here

Here, the scenarios are grouped into four scenario families along two dimensions. The first dimension reflects the degree of globalization in a future world, the second the degree of environmental concern (upper left hand part of the figure). The three other parts of the figure depicts the population size, the size of the economy and the total primary energy use versus CO₂ emissions at the end of the century, respectively. These figures also show three variants of the A1 scenario family, i.e. the scenario family based on a globalized and materially concerned world. The variant differ in terms of which technologies they assume will dominate a future world. In the A1FI family, the energy system is assumed to be fossil fuel based, while the A1T family assumes extended use of renewable energy sources together with nuclear energy. The A1B family is a balanced mix of these two more extreme scenarios. We notice from the figure a tendency towards higher population growth in the fragmented (as opposed to globalized) scenarios, a higher economic growth in the globalized scenarios and higher energy use in the less environmentally friendly scenarios. None of this is surprising. However, it is noteworthy that the span in CO₂ emissions is as large between the different A1-families (i.e. between different technological choices) as it is between scenario families with different basic assumptions on degree of globalization or environmentally friendliness.

Thus, what will happen if we all reach the western standard of living depends entirely on which technologies that standard is based on. The question is in other words not so much

what level of standard of living we can tolerate as it is a question of which technologies we chose to promote.

3. Is the relationship between poverty, development and the environment independent of the type of environmental problem?

The immediate and short answer to this question is *No*: Some local or regional environmental problems like local air or water pollution are caused by local factors often linked to the local state of development. However, other environmental problems, like climate change, are mainly caused by the way of life in our rich part of the world. Thus, the state of development in the poor part of the world has less influence on climatic variables like hurricane and flooding frequencies than on the local water or air quality.

Nevertheless the intuitive answer needs to be moderated. The social impact of climate change is not so much determined by changes in climatic variables as it is determined by the vulnerability of the societies to climate change. And the vulnerability is of course very much dependent on the state of development of the local society, with poor countries or regions being very much more vulnerable than richer nations and regions.

We are thus led to the conclusion that although poverty is not the cause of every type of environmental problem, poverty makes the society more vulnerable to environmental problems. The fight against poverty is thus a necessary ingredient in the fight against environmental problems.

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G. Marland, T.A. Boden, and R.J. Andres (2001): Global, Regional, and National Annual CO₂ Emissions from Fossil-Fuel Burning, Cement Production, and Gas Flaring: 1751-1998 (revised July 2001), <http://cdiac.esd.ornl.gov/ndps/ndp030.html>

Figure captions

Figure 1: Fifty years average surface temperature of the Northern Hemisphere reconstructed from proxy data (tree rings, corals, ice cores, and historical records). The grey area show the 95% confidence limit in the annual data. From 1860 to 2000 are shown variations in observations of globally and annually averaged surface temperature from the instrumental record. The line shows decadal average. From 2000 to 2100 projections of globally averaged surface temperature are shown for six illustrative SRES scenarios from the last IPCC assessment and the IS92a scenario from the previous assessment report. The temperature scale is departure from the 1990 value. (Source: IPCC, 2001).

Figure 2: Regional CO₂ emissions. (Source: Marland et al, 2001, <http://cdiac.esd.ornl.gov/ndps/ndp030.html>)

Figure 3: Regional distribution of population, income and CO₂ emissions in 1990. (Source: IPCC, 2000)

Figure 4: Per capita emissions versus per capita income in some aggregated regions in 1990. (Source: IPCC, 2000)

Figure 5: Global CO₂ emissions versus population, income and primary energy use in 2100 according to IPCC's SRES scenarios. (Source: IPCC, 2000)

Figures

Figure 1

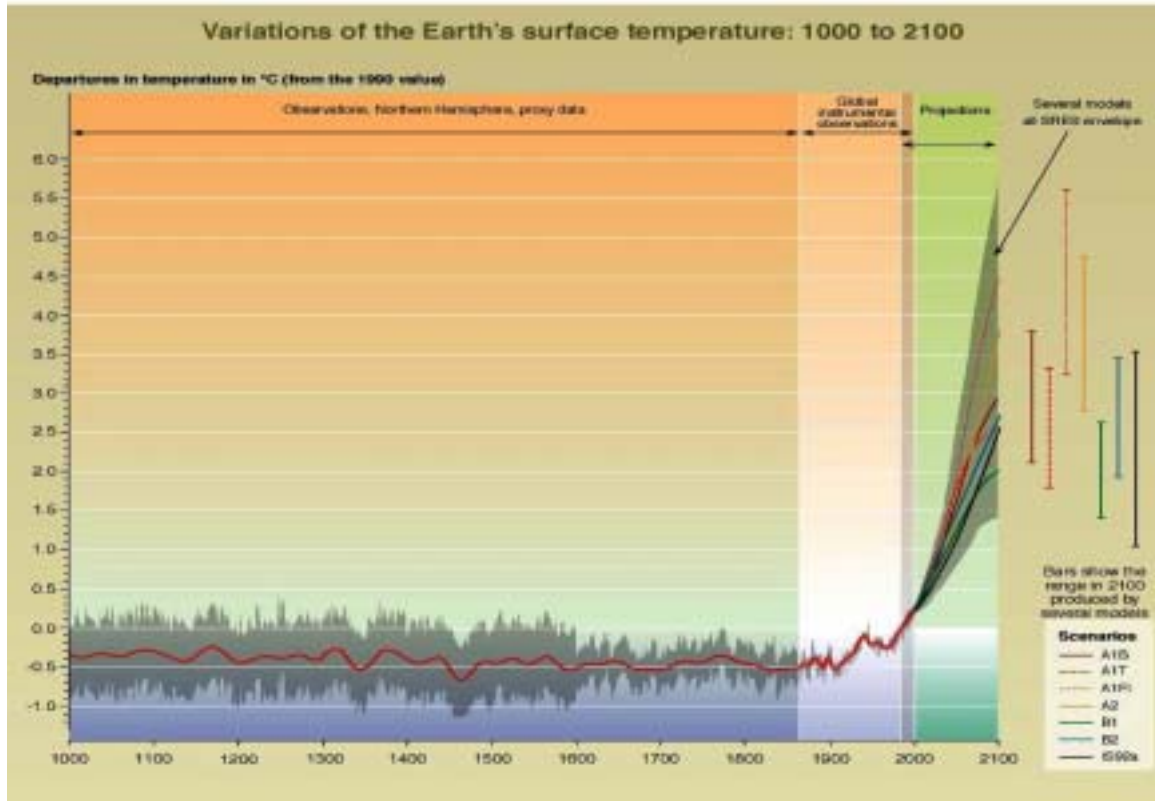


Figure 2

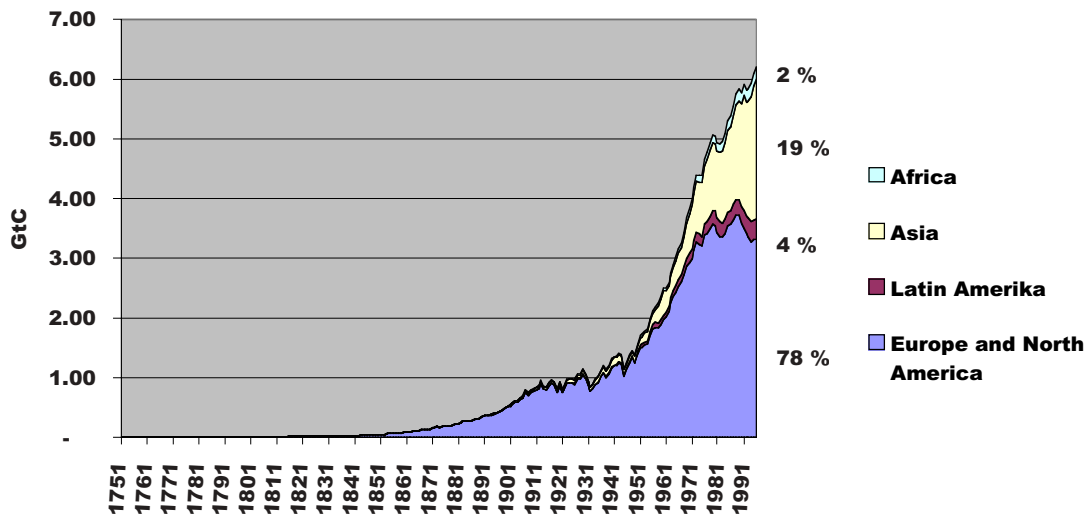


Figure 3

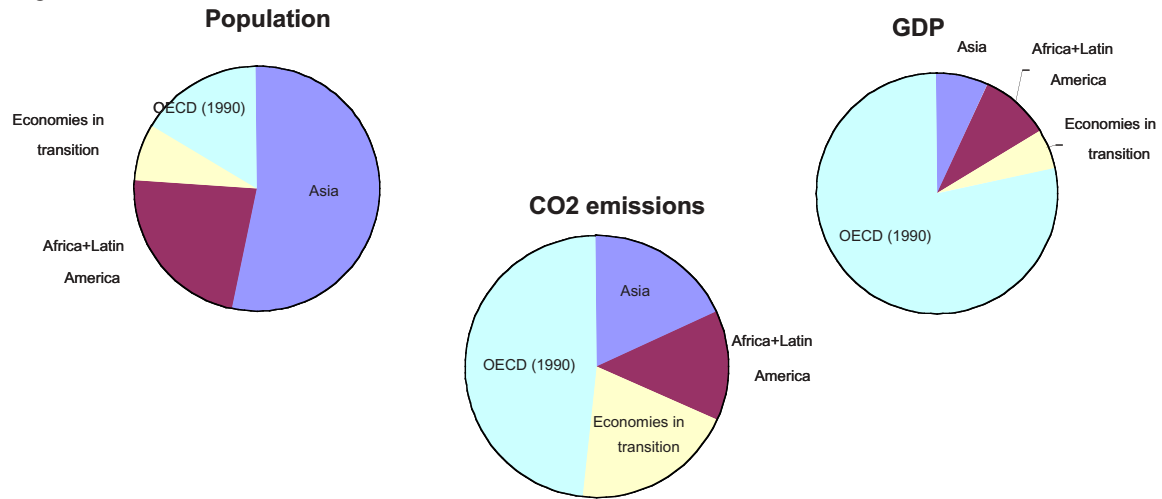


Figure 4

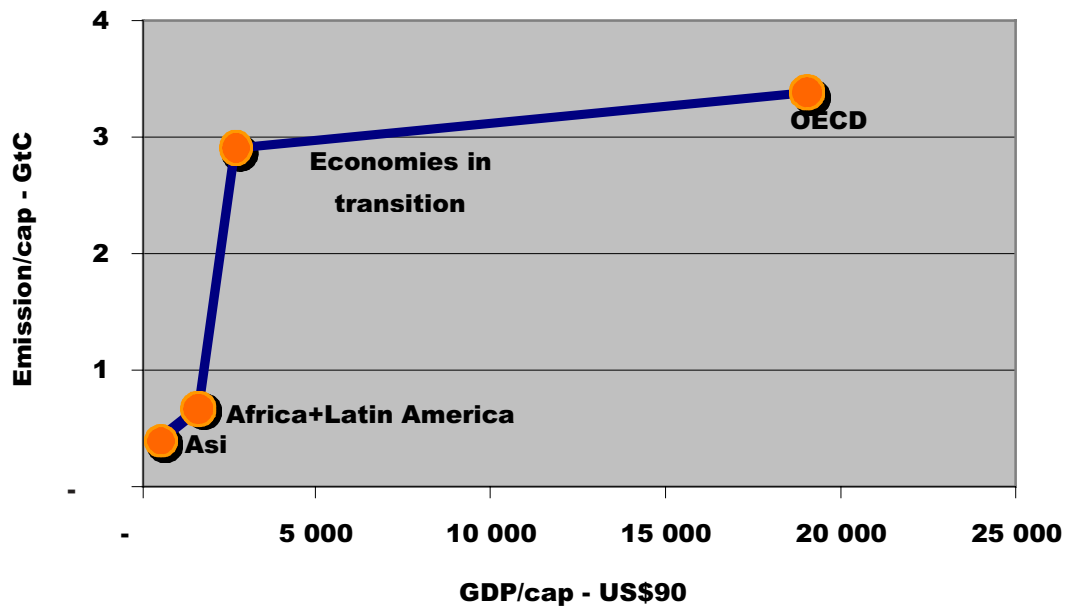
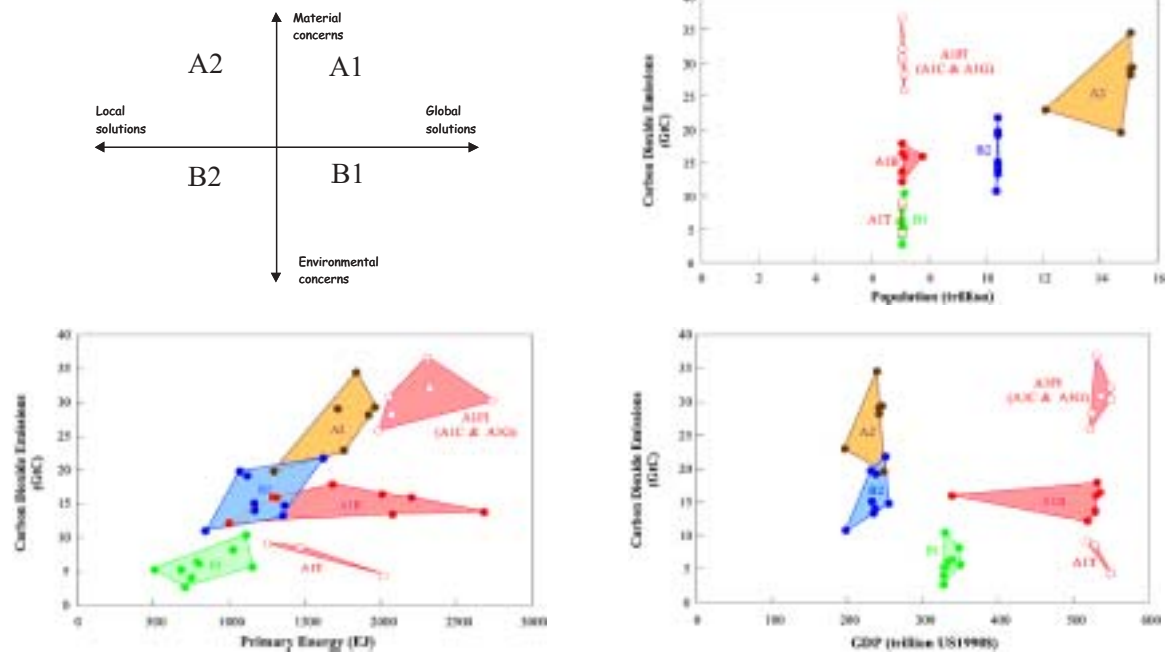


Figure 5



Session 4: How do actors and institutions influence the relationship between poverty, development and the environment?

**The linkage between environment,
poverty and development:
Examples of cooperation among
local communities, NGOs, private
enterprise and government in
Costa Rica**



Dr. Rodrigo Gámez
Instituto Nacional de Biodiversidad
Santo Domingo de Heredia, Costa Rica

The Regional Context





43.5% of
 the
 country is
 dense
 forest
 cover, of
 which
 41.4% is
 in
 Protected
 Areas

COSTA RICA'S EVOLUTION INDICATORS 1940-2000

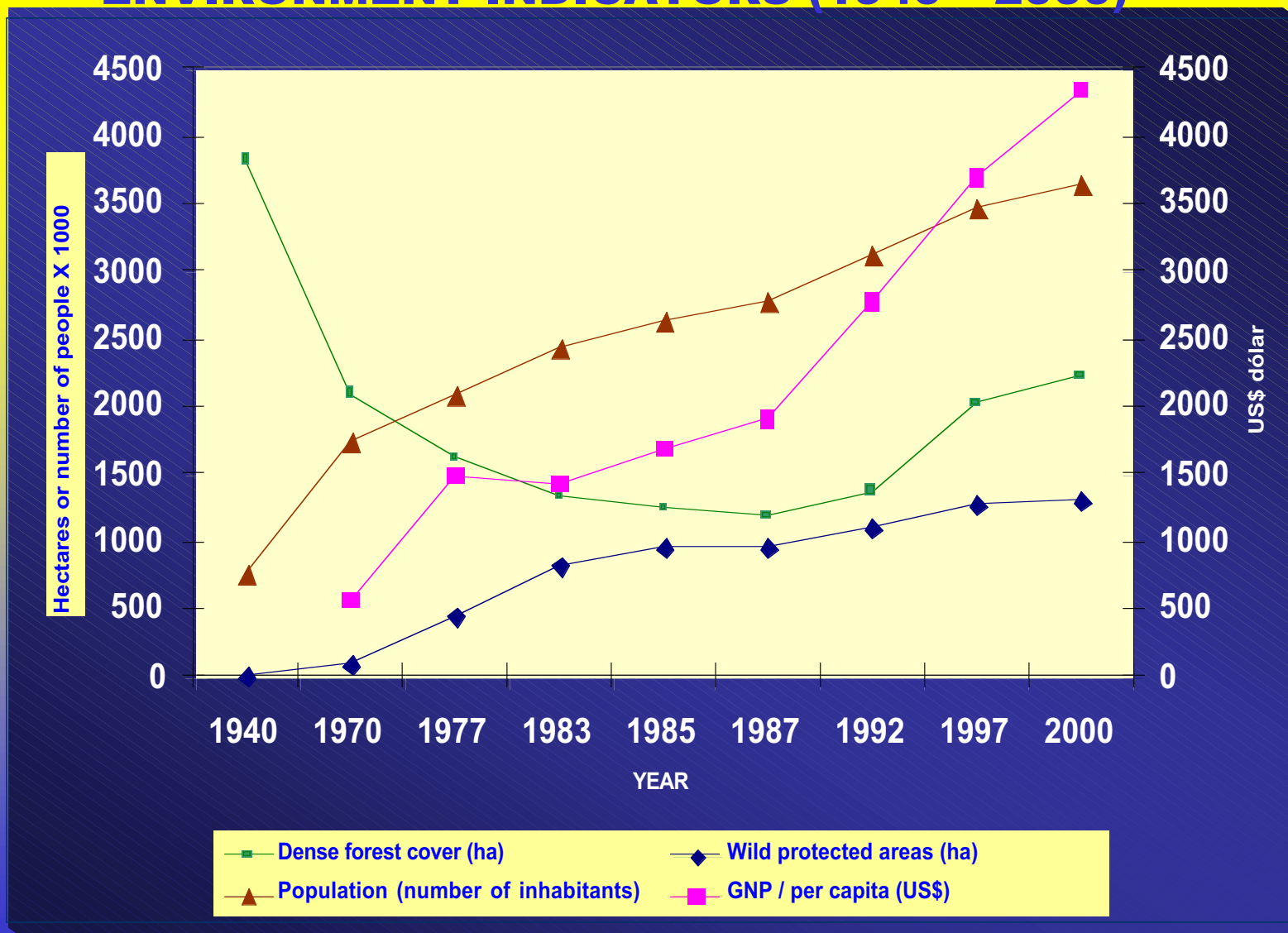
| INDICATOR | UNIT | 1940 | 1960 | 1980 | 2000 |
|--------------------------|------------|------|-------|-------|-------|
| Human development index | Coef. | N.D. | 0.55 | 0.75 | 0.71 |
| Population | 1000 | 656 | 1.199 | 2.276 | 3.943 |
| Poor homes | % | N.D. | 50 | 19 | 21 |
| Life expectancy at birth | years | 46.9 | 62.5 | 72.6 | 77.4 |
| Infant mortality | 1000 | 123 | 68 | 19 | 10.2 |
| Literacy | % | 73 | 84 | 90 | 95 |
| GNP per capita | US \$ 1990 | 702 | 1.08 | 2.022 | 4.028 |

Source: *Estado de la Nación, 2001.*

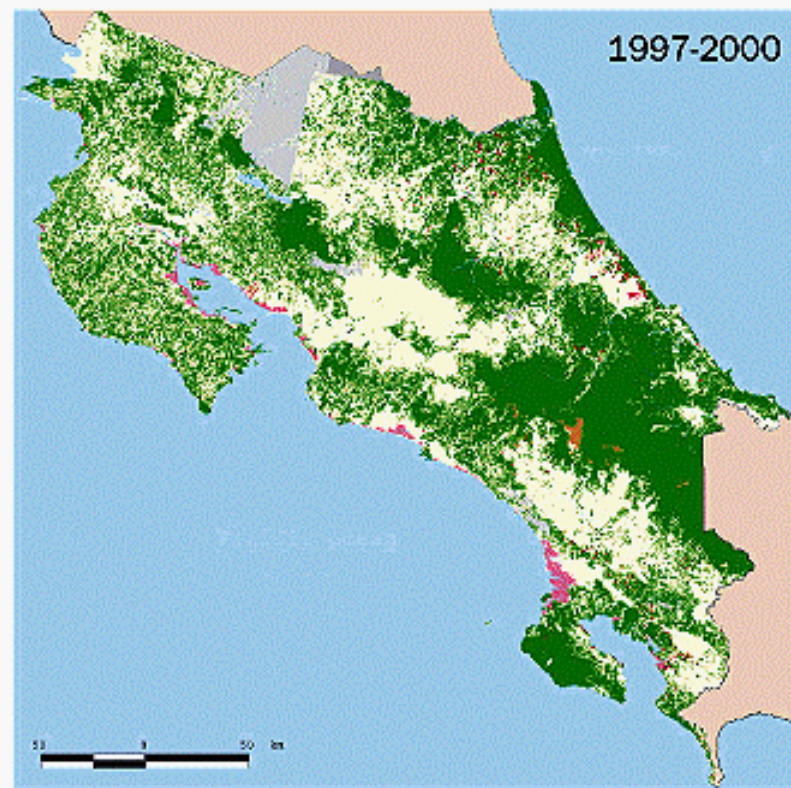
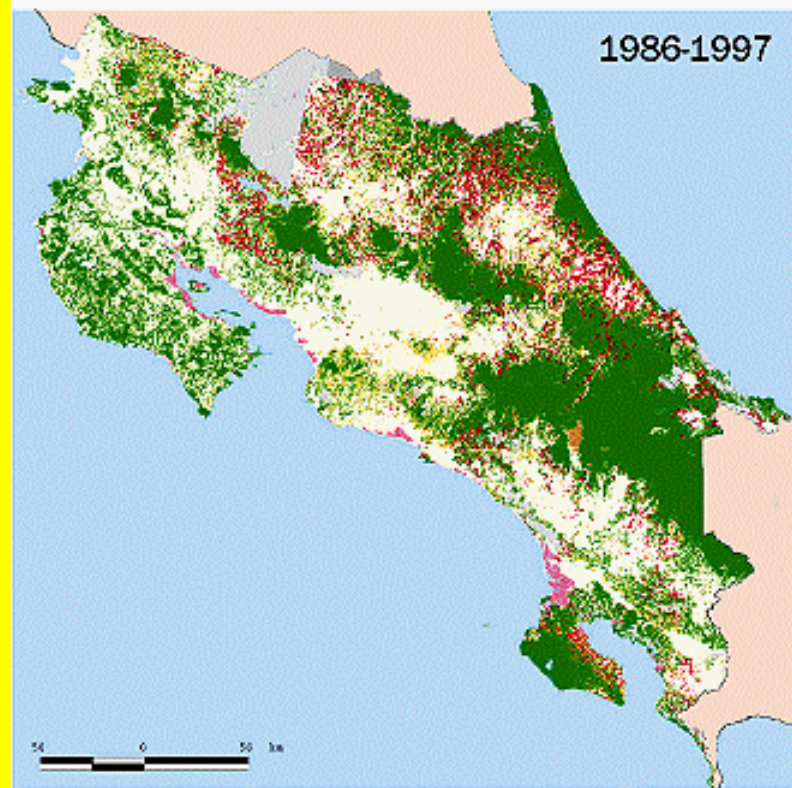
COSTA RICA

SELECTED SOCIAL, ECONOMIC AND ENVIRONMENT INDICATORS (1940 – 2000)

Source: - MIDEPLAN. Principales indicadores de Costa Rica. San José, Costa Rica, 1998 / Watson, U. et al. Making space for better forestry. Policy that works for forest and people, No 6. CCT, IIED / JUNAFORCA. 1998 / MINAE - FONAFIFO, Costa Rica hacia la sostenibilidad de sus recursos forestales. 1998 / SEPSA-MAG 2000.

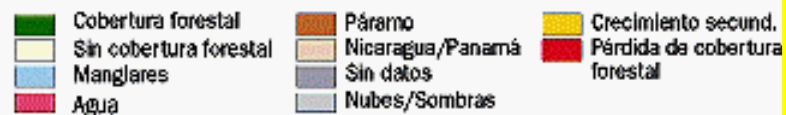


COSTA RICA DENSE FOREST COVER AND DEFORESTATION TRENDS (1940 – 2000)



Source: Centro Científico Tropical – Universidad de Alberta,

Canadá. 2001

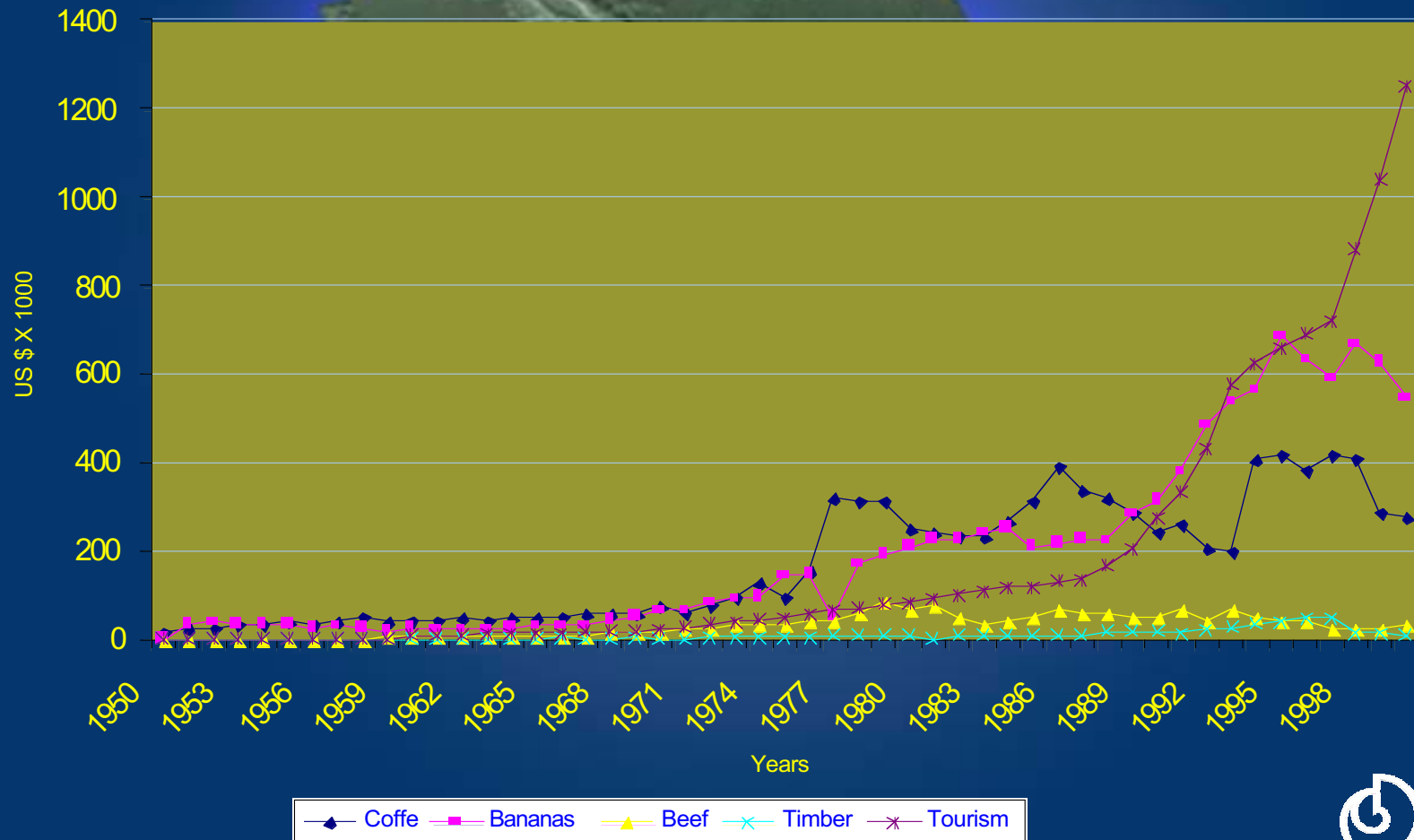


ALEXANDER SALAZAR AJA INOYÓN

COSTA RICA

FOREIGN EXCHANGE (US \$) GENERATED BY SELECTED AGRICULTURAL AND FOREST PRODUCTS AND TOURISM 1950 - 2000

Source: Watson, V et al. Making space for butter forestry. Policy that works for forest and people. No. 6. CCT, IIED, JUNCAFORCA. 1998 y Banco Central 2000.



General remarks

- 
- 🐟 The natural resource degradation trend in Costa Rica reverts when quality of life increases, development model changes and environmental awareness awakens.
 - 🐟 Since 1970 and with fluctuation, environmental problems have received increasing attention by governments and society becoming part of national agendas.
 - 🐟 Nature oriented tourism has become the most productive source of foreign exchange, contributing directly to both conservation and development.

Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica



- 🐟 Planning of National Park Service (1970):
 - 🦜 IICA – CTEI (CATIE)/MAG-SPN
- 🐟 Development of National Park Service
 - 🦜 National Park Service / U.S. National Parks
 - 🦜 Foundation / The Nature Conservancy / World Wildlife Found. / U.S. Peace Corps
 - 🦜 Agrarian Development Institute

Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica



 *Private reserves:*

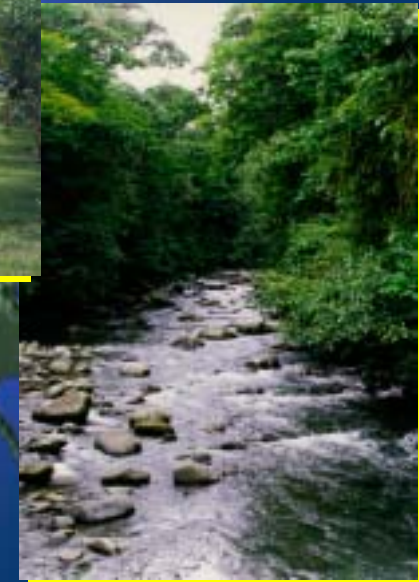
 **Tropical Science Center-
Monte Verde Reserve**

 Private Reserves Network
(110 + reserves; < 5% of
national territory)

 Municipalities

Tropical Science Center Monteverde Cloud Forest Reserve

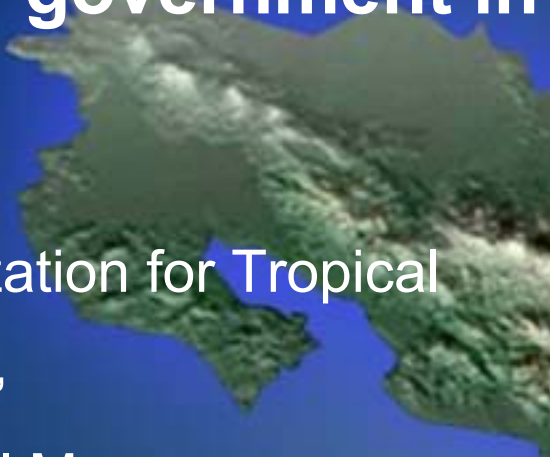
- 🐟 NGO acquires forest reserve for scientific research and conservation in 1962.
- 🐟 Scientific research becomes engine for ecotourism, diversification of natural attractions and conservation.
- 🐟 Research and visitation support management and conservation; 3% of total area used.



Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

Research:

-  Organization for Tropical Studies,
-  National Museum,
-  National and Foreign Universities and individual scientists,
-  **INBio-SINAC.**



INBio / SINAC: collaboration of a NGO and government



Foto: Monika Graff

INBio conducts:

-  The biodiversity inventory, mainly in SINAC's protected areas.
-  The parataxonomist and the biodiversity stations.
-  Collections and information publicly accessible for multiple forms of utilization.

INBio / SINAC: collaboration of a NGO and government



 INBio conducts bioprospecting research activities in Conservation Areas (SINAC).

 Benefits are shared with SINAC.

Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica



Management:

-  FUNDECOR-ACCVC
-  University of Pennsylvania (DJ)-ACG
-  FUNDACA-ACA
-  **ACLAC-Cahuita**
-  University of Costa Rica-San Ramon Biological Reserve
-  INBio-SINAC


Co-management of Cahuita National Park: Community and SINAC

- 🐟 Park established in 1970, total area 22.068 ht.
- 🐟 Conflict of interest between Cahuita community and SINAC
- 🐟 Conflict solved by agreement for co-management
- 🐟 Joint management committee established
- 🐟 Conservation and development benefits.



Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

Protection:

 COVIRENAS (Natural Resources Surveillance Committees), volunteers, brigades, resource guards / MINAE

 NGOs (greens) vs. Government

 FECON

Legislation

 ONG's Congress and Government.



Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

Rural development:

 ACA-Women' cooperative

La Catarata

 UNDP / GEF Small grants program

 **Monte Alto Reserve**



Monte Alto Reserve: a rural development initiative

- Created in 1992 by communal effort; supported by Conservation Area
- Land purchased by community (1175 members) to protect aquifer and guarantee water availability



Monte Alto Reserve: a rural development initiative

- 🐟 Reforestation, forest regeneration promoted
- 🐟 Diverse activities in ecotourism, agrotourism, education
- 🐟 National and international recognition and support.



Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

 *Reforestation:* Private enterprise

 *Environmental Services:*

 FONAFIFO / SINAC / Private enterprise

 **Public Services Enterprise of Heredia (ESPH)/ACCVC/Land owners**



PUBLIC SERVICES ENTERPRISE OF HEREDIA

Forest conservation for water supply

- 🦉 ESPH manages public services (water, power) for Heredia province
- 🦉 Springs and undergrown aquifer provide 20% of water of metropolitan area
- 🦉 Watershed protection required to guarantee future water availability.



PUBLIC SERVICES ENTERPRISE OF HEREDIA

Forest conservation for water supply

- 🍌 Economic instruments created to guarantee resource protection (US \$ 0.005/m³)
- 🍌 Braulio Carrillo National Park and private land owners receive compensation for protection of watershed (opportunity cost in area US \$ 70 / ht. /yr)



| CONSUMO | VALOR | IMPORTE | VALOR | VALOR | VALOR |
|---------|-------|---------|-------|-------|-------|
| 1 | 100 | 0.005 | 0.50 | 0.50 | 0.50 |
| 2 | 200 | 0.010 | 1.00 | 1.00 | 1.00 |
| 3 | 300 | 0.015 | 1.50 | 1.50 | 1.50 |
| 4 | 400 | 0.020 | 2.00 | 2.00 | 2.00 |
| 5 | 500 | 0.025 | 2.50 | 2.50 | 2.50 |

Watershed environmental service


Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

Environmental Education

-  Ministry of Education/MINAE
-  Neotropica Foundation
-  **INBio/INBioparque/Proebi**
-  INBio/SINAC
-  Omar Dengo Foundation/Ministry of Education
-  National Universities



INBio / INBioparque / PROEBi

 INBio's Social Outreach Program –PROEBi-
bioliteracy concept (\$6 million investment)

 INBioparque inaugurated in 2000

 Over 100.000 visitors in nearly 2 years



INBio / INBioparque / PROEBi

- 🐟 Recreation / education
- 🐟 80% nationals, 20% foreigners
- 🐟 Ministry of Education: classroom laboratory; teachers Acacia program
- 🐟 13 different options of programs by ProEBi



Examples of cooperation between local communities, NGOs, private enterprise, and government in Costa Rica

 *Ecotourism:*

 **Private enterprise/ICT**

 **SINAC**

 **Private reserves**

 **Communal initiatives**

 **INBio / SINAC / ICT**



Biodiversity as the core of tourism offer.

ECOTOURISM

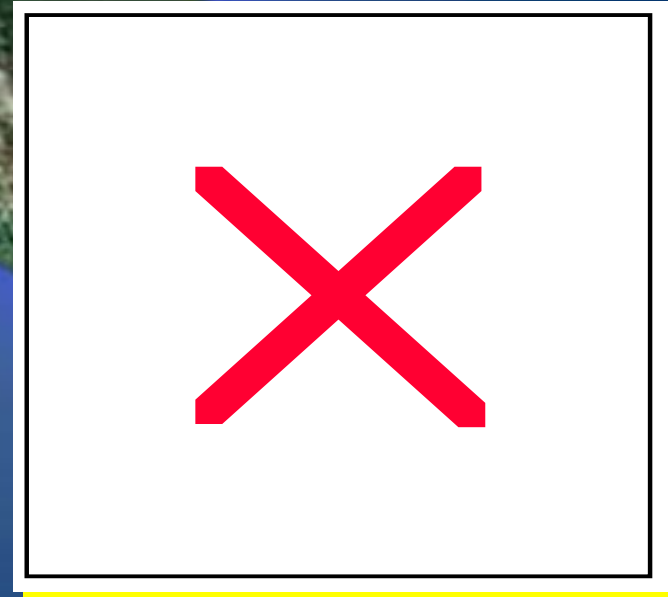
Private enterprise / ICT



- 🐟 Natural, expontaneous development.
- 🐟 Costa Rica is positioned as n°1 high quality ecotourist destination in the Americas.
- 🐟 Nearby 1.1 million in 2001.
- 🐟 Average stay and expenditure is 11 days and US \$1.150.00
- 🐟 Nearby 80% of hotels have les than 40 rooms
- 🐟 Visitation to national parks is approximately 60% nationals and 40% foreigners.

General Comments

- 🐟 NGOs and private enterprise have become main actors, frequently assuming leadership, translating ideas into actions.
- 🐟 Organized communities and municipalities are yet emerging actors.



The global actors and the poverty-environment linkage: what vision for broad-based growth and sustainable development in Africa – the case of PRSP?

Alf Morten Jerve, Chr. Michelsen Institute

**Paper presented at the National Conference on Sustainable Development:
“Poverty and the Environment”
Norwegian Research Council, 6-7 March 2002, Voksenåsen Hotel, Oslo**

Getting ‘sustainable development’ back on the agenda

Among the many development-related concepts and goals having been developed and propagated over the past decade or two, *poverty reduction* stands out as the winner. It is fair to say that it took much of the steam out of ‘sustainable development’. This is most visibly articulated in the massive ongoing effort of preparing national poverty reduction policies – referred to as Poverty Reduction Strategy Papers, by the World Bank and IMF.

The sustainable development discourse in several respects challenged the premises of the Washington-consensus, stating that there are limits to growth, and that the market cannot be the mechanisms for safeguarding inter-generational justice, as envisaged by the Brundtland Commission. The poverty reduction discourse, on the other hand, has to a much lesser degree been antithetical to liberal economics. Regardless of poverty’s many faces and dimensions, economic growth is seen as the main precondition for reducing it. Hence, poverty reduction has been coupled with concepts such as ‘broad-based growth’ and ‘pro-poor growth’. Furthermore, measurements of poverty and target setting remain dominated by money-metric calculations based on consumption or income.

At the Rio+10 summit in Johannesburg UN seeks to bring back ‘sustainable development’ on the global political agenda. The background is a past decade where we have seen a widening gap between rich and poor countries, erosion in the capacity and capability of governments in many poor nation states, and further decline in the condition of the natural environment in most developing countries. The world’s poorest 40 per cent account for only 11 per cent of total consumption. This is not a sustainable condition for obvious political reasons, and from an environmental point of view it is most likely that poor countries will continue to put unsustainable pressure on their natural resources to meet demands of their citizens for a more prosperous life.

UN concludes that we have seen no real progress in connecting economic, social and environmental objectives in national decision-making, since the Rio summit in 1992. At a global level, there is a lack of coherent policies in areas such as trade, investment, aid, technology and security. And, patterns of consumption and production reflect no change in value systems driving economic planning and activity.¹ How to reconcile the aspirations of poor people and poor nations to raise their levels of income, with the concerns for sustainability? How do policy-makers look at the poverty-environment linkage? We shall take a closer look at some of the newly formulated national poverty reduction strategies, with a focus on Africa.

¹ UN 2001, Implementing Agenda 21. Report to the Secretary General, E/CN.17/2002/PC.2/7.

Africa's predicament

Africa, with some exceptions, did not take part in the growth of the world economy during the 1990s, which for developing countries averaged at 4.3% per year. Africa is described by many observers as being de-linked from globalisation, and processes such as increased international flow of goods, services and capital, and rapid expansion of information and communication technologies:²

- Africa's share in world trade declined from 2.7% in 1990 to 2.1% in 2000.
- Its share of private capital flows and foreign direct investment is marginal.
- African states have not improved their income account, continue to rely primarily on official sources of external financing, and have not resolved their debt problem.
- The consumption expenditure of the average African household is 20% less than it was 25 years ago.
- About one-third of the population are undernourished.
- The economic growth taking place is associated with agricultural production, leaving many countries more dependent on a few commodity exports with volatile and generally declining prices.
- Food production has not kept pace with population growth making many countries increasingly dependent on food imports.
- Net deforestation rates are the highest in the world, together with South America.

African leaders struggle to formulate political visions and strategies to counteract these trends, and fluctuate between protectionist positions and wholesale embracing of neo-liberal policies. Development agencies, with World Bank and IMF in the forefront, are very influential actors on the African political scene. They are the main advisors to governments, finance most of the analytical work being undertaken, and exercise the power of the purse more or less overtly. Since 1999, the hegemonic role of the Bretton Woods institutions was substantially reinforced with the introduction of the new Poverty Reduction Strategy Paper initiative, and the subsequent wide endorsement of the initiative from the donor community at large.

The PRSP initiative

The PRSP represents an attempt to get the national government to develop a long-term vision and a medium-term strategy for how to reduce poverty, involving national and international stakeholders in a consultative process. The aim is to achieve better harmonisation of policies and co-ordination of aid. The carrot is debt relief (for countries eligible under the HIPC-2 initiative) and enhanced levels and longer-term commitments of ODA. A total of about 35 countries in Africa are currently involved in PRSP preparation under World Bank guidance. Of those, 5 countries – Mauritania, Burkina Faso, Uganda, Tanzania and Mozambique – have submitted a final PRSP for approval by the Executive Boards of World Bank and IMF.

It is premature to assess development impacts of this new planning and aid management instrument, but a number of researchers have taken an interest in studying the processes of preparing these policy documents. What are the effects of the 'process conditionality' linked to the PRSP-initiative on processes of national policy-making? There has been comparatively less interest, so far, in actually analysing the political messages and policy prescriptions contained in these Papers. And, it is too early to assess how the documents actually function in terms of steering public investments and structuring reforms. The main questions on everyone's lips

² Drawn from UN 2000, op.cit.

are: Will the PRSP only become a one-off exercise fulfilling the formal requirement for further concessional lending? Is it just another paper tiger mainly satisfying the craving of the international aid system for good rhetoric? Or, will the PRSPs enable governments of aid dependent countries to place themselves in the “driver’s seat” of national development. And ultimately, will the PRSPs represent new solutions to poverty reduction in Africa? The jury is still out, and will be for some time. In the following, we shall review how the concept of ‘sustainable development’ figures in the PRSPs.

The new paradigm: partnership and results orientation

To start with, it needs to be underlined that the PRSP initiative represents a change of approach from the previous structural adjustment lending, stimulated by the conclusion that the conditionality of the past, by and large, did not work. The PRSP concept is embedded in a new aid paradigm taking roots from about the mid-1990s. The end of the Cold War spurred development optimism, and the need to develop a more “friendly” vocabulary for international relations was evident. ‘Partner’ became one of the new terms in vogue. The ‘*partnership*’ idea is that donor and recipient – ‘funder’ and ‘funded’ – should cooperate on a more equal basis. The inequality that naturally is enshrined in the aid relation should be sought counteracted by deliberate measures to strengthen what is being referred to as *national* or *country ownership*. In practical terms, this means that the recipient government should be the one to coordinate and manage aid, and that donors should be more sensitive to the local context and align their aid programmes with national policies. These are in no way original ideas, and dominated much of the aid debate in late 1960s and the 1970s. They represent, however, an important change of direction in current aid policy, and the backdrop to this is:

- Studies showed that conditionality did not work. World Bank/IMF successfully forced changes in macroeconomic policies on African countries as conditions for structural adjustments loans and budget support, but the success was mainly limited to simple decisions that could be effected at the level of finance ministers – e.g. exchange rate policy and tariffs. Conditions related to more complex institutional reforms were highly ineffective.
- Studies showed that aid was effective in countries with a “good” policy framework in place, and furthermore, that aid in the form of money had not been effective in generating reform. “Ideas work better than money”, in this respect, the *Assessing Aid* study by the World Bank concluded.
- The neo-liberal paradigm had gone too far in “rolling back the state” as a means to unleash opportunities for private entrepreneurship. Development of the market, private sector, civil society and NGOs require a strong state. Studies of the *Asian Miracle* resuscitated, so to speak, the state as the primary development agent.
- To support the formation of strong, development-oriented and accountable governments, donors have to take the back seat. And there is “no shortcut to progress” as Göran Hydén reminded us years ago. We need a long-term and holistic perspective, as the World Bank president articulated as part of the Comprehensive Development Framework (CDF) concept – i.e. his attempt to summarise main lessons on aid effectiveness.
- However, partnership is a two-sided affair, and a precondition from the donors’ side for jumping to the back seat, is that the partner knows where to drive. There is a shift from *ex post* to *ex ante* conditionality. The latter is also referred to as result-orientation (e.g. in the CDF concept). The donors’ message is: let’s jointly agree on the target, we’ll support you to get there – step-by-step, and with more money coming as you successfully move towards your target.

- Based on this logic and through a succession of conferences and summits UN members states have endorsed a set of international development targets to become the basis for development partnerships in the new millennium – now referred to as the Millennium Development Goals. These are mainly poverty focused, referring to income poverty, health and education, and establish 2015 as the target year.

The first, and most referred to, of the MDGs is the goal to halve income poverty (compared to 1990 levels) in a country over this period. In the following we shall review how Mauritania, Burkina Faso, Uganda, Tanzania and Mozambique plan to do this, and how the concept of sustainable development figure in their strategies. But before getting there we need to look closer at the poverty-environment linkages that will have to constitute the bridge from ‘poverty reduction’ to ‘sustainable development’.

Poverty-environment linkages

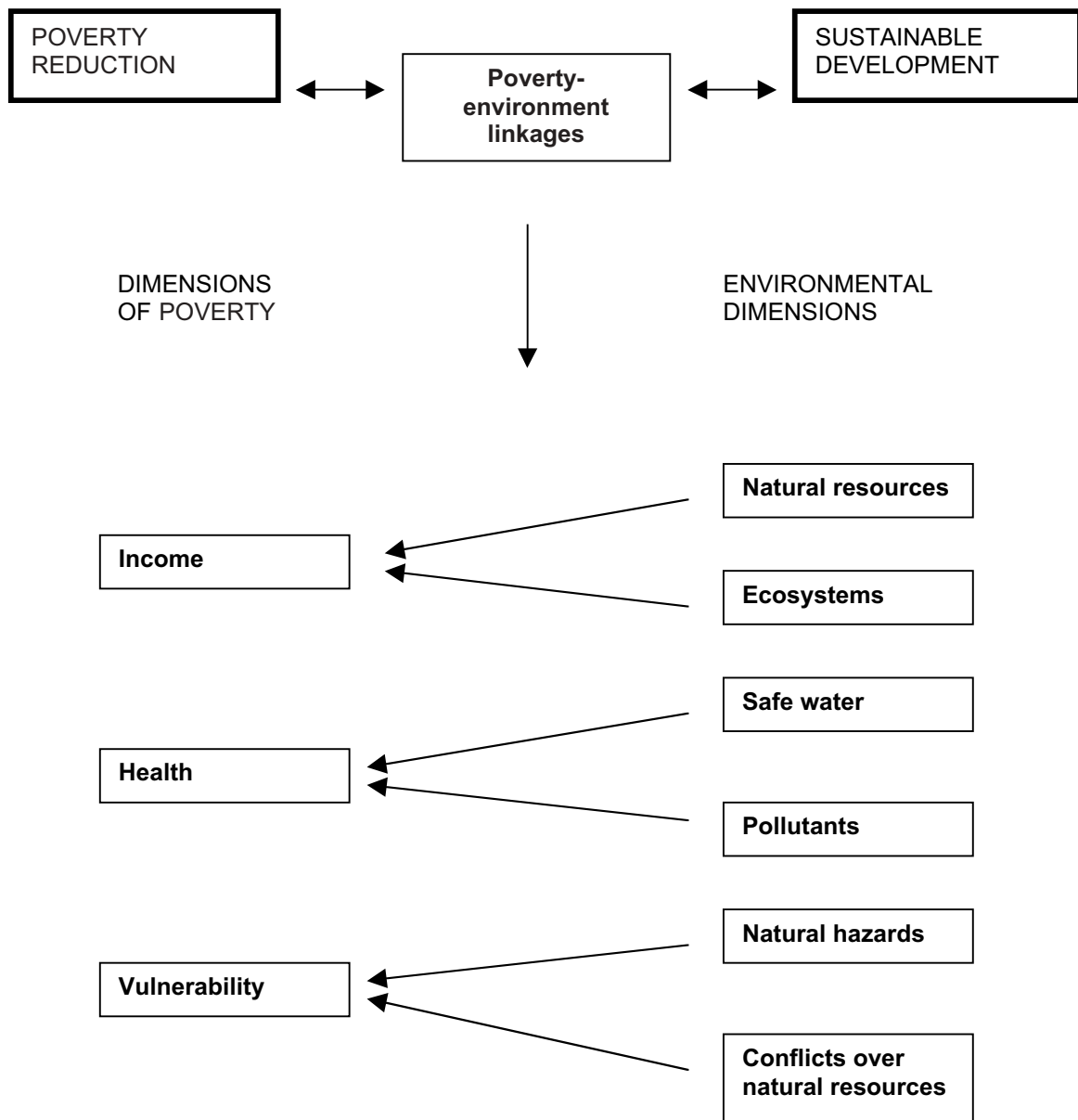
The relationship between poverty and conditions of the environment is complex and context specific. The perception that poor people, especially in rural areas, represent an environmental time bomb, has been refuted by a bulk of research. First and foremost, most environmental degradation is not caused by poor people for the main reason that their levels of consumption and production are much lower than those of the rich. Secondly, empirical studies do not support the assertion that wealth allows people to consider the future and invest in environmental conservation, while poverty leaves people no other option but to exploit the environment. Poor households often take extreme measures to preserve productive capital for the future.³ Thirdly, when primary production systems (agriculture, pastoralism and fisheries) move into a downward spiral of degrading its resource base it is generally not a Malthusian effect of population increase, but the effect of new competitors entering the ground normally with the backing of government policy.

Too often policies and programmes to reduce poverty and promote growth have been at the expense of the health of the environment, and efforts to protect the environment have not always taken into account the interests of the poor.⁴ Rather than seeing poverty as a cause to environmental degradation, which may lead us too assume that reducing poverty in itself promotes sustainable development, there is a need to turn the arrows in the opposite direction, which is illustrated in the figure below. From this point of view we can take a look at the PRSPs.

³ Moseley, W.G., 2001, ‘African evidence on the relation of poverty, time preference and the environment’, *Ecological Economics*, Volume 38, Number 3, pp. 317-326.

⁴ DFID, EC, UNDP and World Bank, 2002, *Linking Poverty Reduction and Environmental Management. Policy Challenges and Opportunities*, Consultation Draft, January 2002.

Figure



The figure above does represent great simplification. There are of course many possible interconnections and feedback loops between the dimensions listed, but we want to make the point of asking: what can environmental management do for poverty reduction? There are win-win opportunities and potential for more rational ways of dealing with trade-offs. What do the PRSPs for Mauritania, Burkina Faso, Uganda, Tanzania and Mozambique say about such opportunities and trade-offs? What can be found in these documents about linkages between economic growth, poverty reduction and sustainable development?

Five PRSPs from Africa: focus on growth while poverty-environment linkages are blurred

The five countries are fairly similar when comparing conventional development indicators. The table below shows that Mauritania and Uganda are slightly above Burkina Faso, Tanzania and Mozambique in GDP per capita terms, while Tanzania join the two as leading on the Human Development Index (UNDP) ranking. Mozambique and Uganda have experienced the highest growth rates, but this is from a very low base due to the previous civil wars. For the other three countries, annual growth has been in the range of 5%, noting that GDP measurements are uncertain in countries with large informal economies and un-registered labour migration and remittances. Population growth is very high, by international standards, and the current pattern of growth barely keep pace with the population increase, leaving limited scope for making a substantial dent in poverty.

The PRSPs respond to this challenge by emphasising the necessity to raise the rate of economic growth. In fact, there is a strong element of backward calculation in the documents, starting from the goal of halving income poverty. The five PRSPs are strikingly similar in setting growth targets at about 8% annually, which mathematically is what is needed to have a broad-based rise in average income, accounting for population growth and assuming that income distribution more or less follows current patterns. To achieve this level of growth the countries commit themselves to the main prescriptions of neo-liberal economic policies – or the so-called Washington, namely prudent macroeconomic policies (keeping inflation low), liberalisation of the economy and seeking global integration.

As a point of departure for assessing the pro-poor profile of the PRSPs and any poverty-environment linkages we need to look at which economic sectors the various national planners identify as the future engines of growth.

However, all five PRSPs clearly acknowledge that poverty reduction is more than achieving growth and its “tickling down” effect. It requires deliberate policy measures to enhance the distributional effects of growth in favour of the poor. What these policies are, however, are not always clearly expressed. We also need to look at how the PRSPs define pro-poor policies. Typical pro-poor policies would include:

- Generation of employment opportunities available to the poor
- Market access for products produced by the poor
- Access to free or affordable essential public services (e.g. education, health services, sanitary environment)
- Secured access to productive assets (e.g. land)

To assess the extent to which the PRSPs incorporate poverty-environment linkages in their analysis, we can translate the linkages identified in Figure 1 into areas of public policy and ask what the PRSPs say about:

- Access and rights to natural resources, such as farmland, natural forests, water sources, fishing grounds etc.
- Access to safe drinking water
- Access to sanitary and pollution free living conditions
- Access to facilities reducing vulnerability from natural hazards
- Access to recourse and remedial actions in the event of conflict over natural resources

Table

| Key development indicators and PRSP targets | | | | | |
|--|-------------------|---------------------|-----------------|-------------------|---------------|
| | Mauritania | Burkina Faso | Tanzania | Mozambique | Uganda |
| GDP/capita ranking 1999 | 165 | 190 | 190 | 193 | 176 |
| HDI Ranking 1999 | 139 | 159 | 140 | 157 | 141 |
| Comparing the two (+ means HDI is higher) | -14 | -17 | 21 | -11 | -4 |
| Below national poverty line | 57 % | 45% | 51 % | 70% | 55% |
| Changes during 1990s | Improvement | Stable | Worsening? | Improvement? | Improvement |
| GDP growth 1998-99 (avg. annual) | 4.8% | 5.2% | 5.6% | 8,6% | 7.7% |
| Population growth 1990-99 (avg. annual) | 2.8% | 2.4 % | 2.9 % | 2.2% | 3.0 % |
| Population 2000 (million) | 3 | 11 | 33 | 17 | 21 |
| Targets according to PRSP | | | | | |
| Year | 2004 | 2000-4 | 2002 (2003) | 2001-5 | |
| GDP growth rate (avg. annual) | 7% | 7-8% | 6% (8%) | 8% | 7-8% |
| Year | 2015 | 2015 | 2010 | 2010 | 2017 |
| Population below poverty line | 17% | 30% | 24% | 50% | 10% |

Sources: PRSPs, HDR 2001 (UNDP), WDR 2001/2 (WB)

Mauritania

The PRSP of Mauritania summarise the development vision in the following words:

“Over the long term, it is anticipated that a *new dynamic within the private sector*, resulting from the structural reforms now underway, the *redirection of the Government’s essential mandates* and improvements in the efficacy of its interventions, as well as the development of the supply of good quality infrastructures and human resources, will ensure *high rates of growth* and help achieve the strategy’s essential objectives, which are the following: (i) reduce the incidence of poverty to 17 percent; (ii) ensuring universal access to basic services; (iii) enabling the country to take advantage of the opportunities offered by *globalization*, while at the same time integrating all citizens and disadvantaged economic zones fully.”⁵ (our emphasis)

The PRSP underlines the dual character of Mauritania’s economy, which is divided between the export oriented mineral (iron) and fishing sectors, supporting the urban economy, and marginal agriculture and pastoralism in a vast rural area extremely vulnerable to climatic variation. But the country is also divided in a difference, which is not at all mentioned in the PRSP. It harbours tense ethnic rivalry between the Arab population (Moors) and blacks, with the former dominating politically and economically and the latter constituting most of the urban and rural poor. There is an escalating problem of urban poverty with the migration from the rural areas to the capital city Nouakchott. About 50% of the population live in the two main cities, which is an increase from 2% in 1962.

The core element of the growth strategy of the PRSP is furthering export growth in mining and fisheries, through increased foreign direct investments (to be attracted by simplified procedures and tax incentives). The PRSP outlines an ambitious reform programme aiming at further deregulation, and states explicitly that disbursement (under HIPC) will be linked to continuation of reforms.

The document notes that this export growth will only have limited spillover effects on Mauritania’s rural poor. It is mainly through the sectors’ contribution to increasing national revenue that rural and urban poverty can be addressed. The document acknowledges the risks involved in the strategy, with the extreme sensitivity of the economy to exogenous shocks, especially the factors determining demand and prices in the world markets for iron and fish.

The Strategy prescribes enhanced public investments in health, education and drinking water supply, sectors which suffered badly during the 1990s, but the financing hinges on rather precarious sources. These include, besides debt relief under HIPC, enhanced levels of foreign aid and increased domestic revenue.

There are few references in the document to sustainable development, and no elaboration of poverty-environment linkages, except for those associated with sanitary living conditions. It states the intent to allocate fish quotas on the basis of “permissible limits”, but does not assess the current state of affairs. As for the iron mines, there is no mention of environmental issues.

⁵ PRSP, p.2

The issue of securing poor people access to productive resources is barely mentioned. The strategy makes support to non-industrial fishing a top priority, but does not outline mechanisms for resource management. Similarly, it states that there is need to introduce more environmentally friendly livestock management, claiming that the country suffers from “a total lack of organization with respect to pasture and range management”.⁶ Most likely, this is a view that the pastoralists themselves will oppose, as it stigmatises the traditional farmers as the cause to the problem. Surprisingly, there is no mention of land tenure issues, which appears to be the root cause to much of the ethnic tension – i.e. that traditional black farmers progressively loose land to urban, largely Arab, investors.

We can conclude that the authors of Mauritania’s PRSP only in a very superficial way have included ‘sustainable development’ as a factor in their strategy.

Burkina Faso

Ministry of Economy and Finance summarise the PRSP for Burkina Faso as follows:

“Acceleration of growth is a prerequisite for reducing poverty: The Government will therefore implement major structural reforms in order to more fully open up the economy to the outside, lower production costs while improving factor productivity, encourage initiative, and support activities to generate income and create jobs, particularly in rural areas. However, the Government recognizes that faster growth alone will not reduce the incidence of poverty. It will therefore adopt policies directly targeting the poor by helping them access essential social services and offering them expanded employment opportunities.”⁷

The rural population represents 94% of the country’s poor, and agriculture and rural development is naturally singled out as the cornerstone of the national poverty reduction strategy. Crop and livestock exports account for 60% of export earnings today, and are envisaged as the main engine of growth in the future, and most concretely, in the short-term, through expansion of cotton exports. There is scope for increased exports of food crops, oil seeds and livestock to other countries in the region, and to promote exports of fruits and vegetables to Europe. To achieve this Government wants to deregulate (i.e. gradually disengage itself from production and marketing), and support the emergence of “professional agricultural organisations” and spur private investments in the sector. Massive investments will be required in human resources and basic infrastructure, for which the country fully depends on external financial assistance.

If look at the elements of pro-poor policies, noted above, we find that the PRSP is vague on **employment effects**. Increased agricultural productivity may not be accompanied with creation of more jobs, and it is not clear to what extent Government envisages supporting family-based farming, as opposed to ‘professional agricultural organisations’. The extent to which poor farming households are likely to benefit from increased **cash crop production** is not being analysed. Besides, the PRSP has no proper risk analysis and no assessment of the market opportunities for Burkina Faso’s exports. Other sources of national revenue is mining (gold primarily) and tourism, but none of these sectors will contribute much to job creation. Government believes that liberalising the economy will create a boom in small

⁶ PRSP, p.26.

⁷ PRSP, p. ii.

enterprises development and export growth, citing Malaysia, Thailand and Mauritius as examples.

The most tangible element of the strategy relates to the **public investment programme**, raising the level of investments in health, education, agriculture and rural roads, using anticipated new inflows of aid and resources freed from debt relief (HIPC). The benefits of these investments, if successfully implemented, will only build up slowly.

Burkina Faso's PRSP refers to previous national policy documents using the term "sustainable human development", but pays only lip service to the concept in the main text. The focus is on economic growth and social services. It represents the orthodox view on the poverty-environment linkage, where poverty is seen as a cause to environmental degradation. Degradation of soil and water resources is a major impediment to economic growth and represents a main cause of poverty. The problem is intensified by fluctuating climatic conditions, putting many marginal households at risk. "Demographic growth and poverty are placing pressure on natural resources that often constitute the main assets of the poor. The situation results in an abusive exploitation of natural resources that tends to compromise the sustainability of development actions."⁸

The PRSP recognises that distribution and **access to land** have a decisive impact on the living standards of rural families. Land and water rights are their primary asset. The document refers to the sluggish process of revising the land legislation since 1984, aiming at more secure land ownership. The document is, however, silent on the longer-term policy objectives of Government. This is surprising, given that the PRSP states that Government wants to encourage new investors in agriculture and livestock farming – "encourage and intensify the development of modern livestock sector so that the sector can attract new players and create jobs." The implication is of course increased competition for the most valuable land. Commercialisation of farmland is generally not to the advantage of poor.

Uganda

The PRSP in the case of Uganda is presented as a synthesis of the main features of the country's Poverty Eradication Action Plan (PEAP). The thrust of the PEAP is to create a framework for economic growth and employment generation. "The PEAP must be based on an understanding of the growth potential of the Ugandan economy, and of the public interventions needed to achieve it."⁹

Studies point to the fact that Uganda already has achieved macroeconomic stability and trade openness, and that gains in terms of economic growth have to be sought through investments in education, improving financial institutions and improving property and contract rights. The future for Ugandan industry is "open competition in a market which is being expanded by rising incomes from agricultural modernisation".¹⁰ Hence, the agricultural sector is the cornerstone in the strategy for reducing poverty, through achieving higher agricultural growth rates and the creation of an economic foundation for non-farm employment in rural areas, where most poor people live. It is noted that much of the reduction in income poverty during the

⁸ PRSP, p.29

⁹ PRSP, p.13.

¹⁰ PRSP, p. 14.

late 1990s was attributed to high coffee prices on the world market and increasing exports. This trend, however, came to an abrupt halt in 2001, clearly demonstrating the vulnerability of the economy.

The PRSP does not raise environmental issues directly. It underlines the need for sustainable management of natural resources, and the need for strengthening land rights for the poor. The new Land Act is supposed to promote this, but the mechanisms are not explained. The Plan also advocates the need for restocking programmes for rural livestock to create viable herds. This is politically a very sensitive issue, since the armed conflict in the north of the country has its popular base among pastoral people. Poverty reduction in the Northern Uganda is entirely dependent on a lasting resolution of the conflict. In sum, it is not possible to read from the PRSP for Uganda any attempt to bring in poverty-environment linkages and develop a sustainable development perspective.

Tanzania

The PRSP for Tanzania identify four strategic areas:

“First, the Government will continue to maintain sound macroeconomic policies and intensify the implementation of reforms aimed at bolstering market efficiency, notable agriculture, and raising factor productivity. Second, while the budgetary expenditure will continue to be restrained because of macroeconomic considerations, special efforts will be made to channel the limited Government resources toward the support of key programs and social services... Third, the Government will put increased emphasis on reforms aimed at promoting export-oriented expansion and diversification of the “pro-poor” sectors, with a view to enabling the poor to share increasingly in the benefits of globalization. Fourth, efforts will be made to raise steadily investments ..., including through initiatives focusing on bolstering private investment in the cultivation of traditional and new crops, small and medium size enterprises, and informal sector activities.”¹¹

The vast majority of the poor live in rural areas, and pro-poor growth in the case of Tanzania is essentially about the role of the agricultural sector in the economy. The PRSP clearly recognise this and confirm the Government’s intention to stimulate agricultural growth through market-oriented reforms and removing what remains of direct state involvement in the sector. Whereas Tanzania obviously has the potential for increasing agricultural productivity and exports, the PRSP does not explain how the poor, in particular, stand to benefit from Government’s new policies promoting this.

It is critically important that the role of agriculture as a safety net is being acknowledged. The most critical factor is likely to be to sustain poor peoples’ access to land, for subsistence agriculture, and access to basic inputs. Until recently, traditional land tenure and land laws ensured that all rural households had basic user rights to farmland. There is no mention on the PRSP of the adverse effects that increased commercialisation of agricultural land may have on marginal households that easily may have to sell or mortgage their land to manage through crises.

Poverty-environment linkages are barely mentioned in the document. It notes that rural households, and the poorest in particular, are heavily dependent on

¹¹ PRSP, p.14-15.

“environmental resources”, such as forest products, for income generation. There is no mention, however, of how Government wants to ensure sustainable management of such resources in the future.

Broadly speaking, Tanzania’s PRSP has two main messages. Firstly, it assures the donor community about its commitment to pursue economic liberalisation, and secondly, it makes a plea for enhanced levels of aid to support public investment – to health, education, agriculture extension, rural roads, water, judiciary and HIV/AIDS.

Mozambique

The Action Plan for the Reduction of Absolute Poverty (2001-2005) states that:

“For a poor country such as Mozambique, rapid growth is an essential and powerful tool for poverty reduction in the medium and long-term. Without growth, the objective of increasing the capacities and expanding the opportunities for the poor will continue to be severely constrained by the lack of public and private resources. Therefore, the strategy contains policies aimed at creating a favourable climate for stimulating investment and productivity, and achieving an average annual GDP growth rate of 8%. The strategy also includes policies and programmes to ensure that growth is inclusive, so that the poor will benefit integrally. This, in the final analysis, will occur through greater access to assets.... A pro-poor growth strategy also requires a policy climate which stimulates the private sector to accelerate job creation and increase income generating opportunities through self-employment.”¹²

The situation in Mozambique is similar to Tanzania, with the bulk of the population in rural areas (70%), and the majority of the poor linked to family-based agriculture. Hence, the strategy makes agriculture and rural development the priority, and underlines the need to raise productivity and create access to markets. The priority of the state is to improve the road infrastructure and provide water and energy. It is first of all the Maputo region which has benefited from the economic growth of the past years, having significantly lower poverty rates than the rest of the country.

Whereas the Strategy clearly envisages a role of the State as creating an enabling environment for private sector development, it is less precise on how far to roll back the State. It is evident from public consultations on the Strategy that people are frustrated by the lack of efficiency in public institutions, while at the same time they look for the state to ensure that rural areas have access to markets and financial services, and the build-up of agro-industries creating a demand for rural products.

Almost all rural households have access to farmland, and land is not a limiting factor for poor peasant, but rather their manpower capacity, access to improved technology and market outlets. Statistics show that less than 10% of rural households sell surpluses of maize, cassava and cotton.

Environmental issues are mentioned, but have no prominent place in the document. It emphasises the regulatory framework for environmental institutions and the need support the National Council on Sustainable Development. There is, however, not analysis of which are the most critical environmental problems, and no attempt to integrate environmental issues in the poverty analysis. Poverty-environment linkages do not figure among the main determinants of poverty identified: slow economic

¹² PRSP, p.2-3.

growth; poor levels of education; high dependency rates in households; low productivity in family agriculture; lack of employment opportunities; and poor rural infrastructure.¹³

Conclusions: from opportunities to rights

There are main ways to read documents such as the PRSPs presented above, depending on what one will be looking for, and one's inclination to look at the glass as half-full rather than half-empty. A recent environmental review, conducted by the World Bank, of 40 PRSP documents (mostly Interim PRSPs) concluded that there is "considerable room for improvement". The documents, according to the review, tended to mention environmental issues of relevance to poverty reduction, but hardly any contained further analysis of this perspective.¹⁴

A critical review of the PRSPs will see them as:

- narrowly neo-liberal
- instrument for global integration, but how does it play out locally
- public management at the expense of political debate
- consensus and inclusion overlook conflicts of interests and ideological divides
- international surveillance at the expense of local autonomy

Reference to poverty reduction appears to be more cosmetics on a structural adjustments doctrine that remains as sharp and narrow as ever. The links between liberalisation and openness and poverty is trumpeted even where evidence is thin. The main strategic elements for the neo-liberal approach for promoting of faster growth and poverty reduction include:

- improving the climate for the private sector, thereby generating jobs and higher wages;
- reforming State enterprises to improve efficiency and free up fiscal resource for poverty reduction program;
- restructuring the banking system to reduce the risk of financial crisis, which could otherwise undermine poverty reduction efforts; and
- integrating with the world economy to expand labor-intensive exports.¹⁵

In this agenda, so far, there has been little attention towards a sustainable development perspective. None of the PRSPs ask questions about environmental costs and risks associated with the ambitious growth agenda. And, more worrisome from a poverty reduction perspective, the documents are mostly vague and ambivalent when it comes to articulating concrete redistributive policies. There is clearly a need to focus more attention on the *rights* of poor people, in addition to expanding economic opportunities. There is no reason to believe that trickle-down economic policies will serve the poor any more effectively in this decade than what we experienced in the 1950s and 1960s – when the world economy really boomed.

¹³ PRSP, p. 19.

¹⁴ Bojö, J. and R.C. Reddy, *Poverty Reduction Strategies and Environment. A Review of 40 Interim and Full PRSPs*, Environment Department, World Bank, December 2001.

¹⁵ Craig, D. and D. Porter, 2001, 'Poverty Reduction Strategy Papers: A new convergence. What does it miss, and what can be done about it?', paper presented at the Regional Conference on National Poverty Reduction Strategies, organised by World Bank, UNDP, IMF and ADB, Hanoi, 4-6 December.

In summary, we find that:

- PRSPs are firmly rooted in a neo-liberal development paradigm with economic growth as the key strategic variable;
- PRSPs project optimistic scenarios of economic growth, to be achieved by linking national economies to global markets;
- PRSPs are weak on the analysis of environmental effects of this growth pattern;
- PRSPs are weak on redistributional effects of the growth – i.e. why it is pro-poor;
- PRSPs generally avoid using the concept of rights – i.e. that the so-called ‘inclusion’ of the poor becomes enshrined in legal instruments.

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**Democratization, Globalization and Sustainable
Development in South Korea**

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I. Introduction

South Korea has undergone profound economic transformation since the past five decades. From a dirt poor country of per capita income of \$89 in 1961, it has emerged as one of the most powerful economies in the world. Per capita income has risen to almost \$10,000 by the year 2,000, and its economic size has become the thirteenth largest in the world. Beneath the miraculous economic transformation lie the workings of the developmentalist coalition that has crafted the political and institutional foundation for rapid economic growth (Lee, 1992; Evans, 1995; Weiss and Hobson, 1995; Maxfield and Schneider, 1997; Moon, 1998). It is through the developmentalist coalition that the South Korean government had been able to implement the policies of 'growth first, distribution later' and 'growth first, environmental integrity later.' Such orientation might have been inevitable in order to overcome the vicious circle of poverty and underdevelopment, to mobilize resources, and to expedite the process of industrialization.

But the developmentalist paradigm, that governed the Korean society and economy since the mid-1960s, began to reveal new limits and contradictions. Worsening social and economic inequalities, repressive political regime, and resource scarcity and environmental degradation, all of which were by-products of the paradigm, severely undercut gains from rapid industrialization and economic growth. Facing formidable internal and external challenges and constraints, the developmentalist paradigm and underlying dominant political coalition were also subject to the law of diminishing return. They could no longer serve as *deus ex machina*. Liberty, equality, and environmental integrity have emerged as new social values as critical as growth and security. Two major trends have made an important contribution to precipitating the paradigm shift. While democratic transition in 1987 opened and expanded new space for popular political maneuvering of these alternative values (Lee SH, 1993; Kim SH, 1996; Yoo, 1995), the grand process of globalization has also fostered such transition (Smith, 1998 ;Yearley, 1996). Of these transitions, the politics of democratic transition and distributive justice have drawn extensive scholarly and policy attention. But very little attention has been paid to the case of the rise of new environmental politics in South Korea.

Against this backdrop, this paper is designed to explore the dynamics of environmental politics in the context of democratization and globalization. First, the paper makes an overall assessment of

development and environmental performance in South Korea. Second, the paper elucidates impacts of democratization on environmental politics through case studies of non-governmental organizations (NGO)' activities. Third, the paper looks into how new forces of globalization have affected the changing nature of environment politics and policies. Finally, the paper analyses the dynamic interplay of democratization, globalization, and environmental politics in South Korea and derives several theoretical and comparative implications.

II. Development and Environment in South Korea: An Empirical Overview

South Korea used to present a classical example of trade-off between development and environment. While being obsessed with hasty economic development, South Korea had virtually ignored its environmental consequences. Trajectory of economic development in South Korea illustrates the fallacy of Faustian bargain in an eloquent manner. South Korea was traditionally an agrarian society. To cope with poverty and underdevelopment associated with it, the South Korean government initiated an ambitious development strategy. Starting with an aggressive labor-intensive export-led growth strategy, it rapidly moved into the heavy-chemical sectors. In particular, its transition to the heavy-chemical industrialization in 1973 is noteworthy. Disregarding inflationary consequences, the Park Chung Hee government undertook an ambitious heavy industrialization plan not only to adjust to shifting comparative advantage, but also to create forward and backward linkages to the defense industry. Along with the export-drive, the South Korean government attracted foreign direct investment by creating pollutant havens in free- trade zones such as Masan, Changwon, and Goomi (Jung JS, 1997).

Consequently, the South Korean economy showed a phenomenal growth by maintaining an annual average growth rate of ten percent for the past four decades. Per capita income rose from \$80 to \$10,307 in 1997. Exports grew from \$33 million in 1960 to \$130 billion in 1996, and structure of exports was radically shifted toward the manufacturing sector (Song, 1997:60-61; The Bank of Korea (<http://www.bok.or.kr>), *Economic Statistics Yearbook 1997*). Such rapid industrialization accompanied concurrently galloping urbanization and exponential growth in consumption. Given South Korea's small geographic size, a relatively large population, and poor resource endowment, rapid industrialization, urbanization, and a sharp surge in consumption brought about almost unbearable load on its econ-system as well as severe environmental degradation. Authoritarian rule backed up by the developmentalist coalition virtually deprived South Korea of any other viable alternatives but 'growth at the expense of environment.'

In fact, South Korea underwent serious environmental degradation throughout the 1970s and 1980s. Air pollution posed a new social problem. It was closely related to the pattern of energy consumption. Coal consumption rose by double from 10 million tons in mid-1960s to 20 million tons by the mid-1970s. Consumption of all sorts of petroleum increased by seven times during the same period from 14,737 barrels in 1966 to 105,119 barrels in 1975 (National Statistics Office, <http://www.nso.go.kr>). A sharp rise in energy consumption resulted in severe air pollution. Emission of air pollutants increased by 2.7 times from an annual average of 5.4 ton/km² 1965 to 14.5 ton/ km² in 1974 (Jang, 1980). In addition, widespread use of automobiles created new environmental problems of smog, emission of sulfur dioxide, nitro dioxide, and carbon dioxide. Big metropolitan cities such as Seoul, Busan, and Taegu turned out to be victims of air pollution. Water pollution also became serious. Construction of large industrial complexes along major rivers such as the Han River, Nakdong River, Geum River, and Yeongsan River severely damaged the quality of water with large-scale release of industrial sewage. Heavy population density of these river basins further complicated the situation. Up-streams of these rivers, which are the sources of tap water for residents of metropolitan areas, could not satisfy the standards of edible fresh water. Along with air and water, disposal of solid wastes emerged as a major problem throughout the 1970s. While increased consumption led to a sharp rise in solid wastes, rapid industrialization entailed enormous amount of industrial wastes. Yet, South Korea lacked technology and facilities to process these wastes. Moreover, collective action dilemma further prevented the government from finding suitable sites for disposal, aggravating the pollution problem (Moon and Oh 1999).

What is really amazing is the reversal of trends since the mid-1980s. According to the 1998 OECD report of environmental indicators, South Korea has performed quite well in improving its environmental quality. The most remarkable improvement has been made in ensuring air quality. For

example, emission of carbon dioxide per capita in South Korea improved from 8.3 ton in 1995 to 7.8 ton in 1997, which is lower than OECD average of 10.9 ton. The United States (19.9 ton), Germany (10.8 ton), and Japan (9.2 ton) emitted more carbon dioxide than South Korea in the same year. Of major industrialized countries, France (6.2 ton) was better than South Korea. South Korea has also performed better in emission of sulfur dioxide, which is another important indicator of air quality. Its per capita emission of sulfur dioxide was 34 kg, which is lower than OECD average of 40 kg in 1997. In the case of nitro dioxide, South Korea has showed an improving performance. The emission of NO_x per capita was 26kg, which is lower than OCED average of 40kg.

The OECD report provides another interesting data on the improvement of water quality in South Korea. When measured in terms of demand of oxygen and amount of nitrates, water quality of the Han River, the primary source of tap water for the Seoul metropolitan city, was better than the Donau River and the Rhine River in Germany, the Mississippi River in the United States, and the Seine River in France (OECD 1998). South Korea also scored positively in the area of solid wastes. Disposal of solid wastes per capita in the South Korea's urban area was 390 kg in 1997, lower than OECD average of 530 kg. The figure is far better than major OECD countries such as the United States (720 kg), France (560 kg), Great Britain (490 kg), and Japan (400 kg).¹

As Table 1 demonstrates, data from the Fraser Institute give a more precise picture of environmental improvement in South Korea during the 1985-1997 (http://www.fraserinstitute.ca/publications/critical_issues/2000/env-indic/section_18.html). In four categories of environmental integrity (air quality, water quality, solid wastes, and conservation of natural resources), South Korea has shown a remarkable improvement in air quality and solid wastes. Using 1985 as the base year (benchmark index=100), the Fraser Institute calculated that South Korea has decreased its environmental degradation to 85 in 1990 and to 59 in 1997. Net change between 1985 and 1997 was -41. This is quite a significant improvement. Overall degradation in solid wastes has also been reversed from 100 in 1985 to 74 in 1990 and to 67 in 1997. However, water quality and conservation of natural resources continue to remain major sources of degradation. Water quality has degraded from 100 in 1985 to 114 in 1990 and to 119 in 1997. Profile of conservation of natural resources has not improved either. This might be attributed to a sharp rise in water and energy consumption. While changing structure of life style from traditional housing to apartment living increased water consumption, precipitating a acute fresh water shortage, an exponential growth in public ownership of private passenger cars should have aggravated conservation of natural resources. For example, South Korea's daily oil consumption is the sixth largest in the world in 1999, and import of crude oil accounted for 66 percent of all energy imports in 1999 (*Chosun Ilbo*, July 23, 2000).

Table 1. Environmental Indicators: Relative Severity of Environmental Problems in South Korea (base year 1985)

| | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | Net change |
|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|------------|
| Air Quality | 100 | 92 | 94 | 92 | 87 | 85 | 82 | 78 | 71 | 67 | 65 | 65 | 59 | -41 |
| Water Quality | 100 | 99 | 91 | 96 | 101 | 83 | 76 | 69 | 76 | 93 | 95 | 99 | 119 | 19 |
| Solid Waste | 100 | 84 | 95 | 79 | 74 | 74 | 78 | 65 | 71 | 70 | 70 | 68 | 67 | -33 |
| Natural Resources | 100 | 100 | 101 | 106 | 110 | 114 | 124 | 109 | 101 | 101 | 96 | 113 | 119 | 19 |
| Overall Average | 100 | 94 | 96 | 93 | 93 | 89 | 90 | 80 | 80 | 83 | 82 | 86 | 91 | -9 |

*Annual values >100 represent an increase in environmental degradation; annual values <100 represent a decrease.

¹ Statistical data are used here from the summary of OECD Environmental Indicators in 1998 provided by the Ministry of Environment in Korea (<http://www.me.go.kr/html/98oecd.html>).

Source: The Fraser Institute (http://www.fraserinstitute.ca/publications/critical_issues/2000/env-indic/section_18.html.)

Despite sagging performance in water quality and conservation of natural resources, South Korea has demonstrated a gradual amelioration in environmental integrity. As Table 1 reveals, overall average of environmental quality has improved over time since 1985. What accounts for such improvement? We argue while changing social paradigm has improved people's awareness of environmental issues, democratic changes, expansion of civil society and non-governmental organizations (NGOs), and increased political bargaining power by environmental NGOs facilitated overall changes in South Korea's environmental policy.

III. Democratic Changes and Environmental Politics

South Korea underwent a dramatic democratic transition in 1987 after twenty-five years' iron-fist authoritarian rule of Park Chung-hee and Chun Doo-hwan.² The transition underscored several profound changes in Korean society and politics, which accompanied far-reaching implications for environmental politics and policies.

First is an overall realignment of dominant social paradigm. To borrow Inglehart (1989)'s terminology, South Korea underwent a major paradigm shift from the materialist to post-materialist one. The developmental era in the 1960s and 1970s emphasized materialist values framed around growth, productivity, exports, and national security. Throughout the 1980s, however, South Koreans began to show pronounced fatigue effects on these values. While the advent of the post-Cold War order undercut traditional emphasis on national security, relative material affluence attained through two decades of successive economic growth induced the public, especially the middle class, to defy old materialist values. Instead, new social issues such as economic justice, environmental conservation, women's rights, and prohibition of corruption began to dominate public discourses³, which eventually emerged as major political issues, fueling public discontents with the Chun regime as well as fostering the democratic transition. It is through overall change in social ambiance that environmental issues were able to attract social and political attention.

Second, democratic opening not only precipitated the proliferation of civil society, but also contributed to NGOs' political activism. As Table 2 illustrates, prior to the 1980s, NGOs' activities were virtually negligent. Of total 3643 existing NGOs, only 765 (22.5 percent) were established prior to the 1980s. A great majority of Korean NGOs (2878 cases, 77.5 percent) were established in the 1980s, especially after the democratic opening in 1987. The expansion and empowerment of NGOs fundamentally undercut the power and influence of the developmentalist coalition. In fact, it was on the wane not only because of diminishing state intervention in markets and ruptured relationships between the state and business, but also because of new political governance that undermined the organic ties between the two (Moon, 1998; Fields, 1997). Such changing political terrain opened a new space for intensified political maneuvering by NGOs, facilitating social movements for environmental issues. Size of environmental NGOs is relatively small (259 NGOs), compared with other NGOs, but its political activism has been most pronounced.

² See Lee MW (1990), Cotton (1989) and Lee SH (1993).

³ On new social issues, see Ports and Diani (1999) and Scott (1990:19).

Table 2. Establishment of NGOs over time in South Korea

| | Number (cases) | Pre-40s (%) | 50s | 60s | 70s | 80s | 90s | Total (%) |
|---------------------------|----------------|-------------|------|------|------|------|------|-----------|
| Civil society | 908 | 4.9 | 1.7 | 5.4 | 7.6 | 18.4 | 62.0 | 100.0 |
| Local community | 192 | - | - | - | 7.7 | 27.4 | 52.8 | 100.0 |
| Social service | 686 | 1.6 | 4.1 | 6.4 | 7.7 | 27.4 | 52.8 | 100.0 |
| Environment | 259 | 0.4 | - | 0.8 | 2.7 | 8.5 | 87.6 | 100.0 |
| Culture | 563 | 5.3 | 2.5 | 7.6 | 10.5 | 23.8 | 50.3 | 100.0 |
| Education/Academic | 208 | 2.4 | 1.9 | 3.8 | 7.7 | 28.8 | 55.3 | 100.0 |
| Religion | 97 | 5.2 | - | 9.3 | 21.6 | 27.8 | 36.1 | 100.0 |
| Labor/Agriculture | 1997 | 3.6 | 4.1 | 10.7 | 9.6 | 25.4 | 46.7 | 100.0 |
| Economy | 473 | 2.7 | 2.7 | 15.6 | 15.2 | 22.2 | 41.4 | 100.0 |
| International | 42 | 2.4 | 4.8 | 21.4 | 21.4 | 19.0 | 31.0 | 100.0 |
| Others | 18 | - | 16.7 | 16.7 | - | 22.2 | 44.4 | 100.0 |
| Total | 3643* | 3.2 | 2.4 | 7.2 | 9.0 | 21.0 | 56.5 | 100.0 |

Source: Compiled from the Directory of Korean NGOs by the Citizens' Movement Communication Center (<http://www.kngo.net/new/pds/pds-cmcc.htm>).

Third, expansion of environmental NGOs and their political activism have made a significant contribution to fostering changes in environmental policy. As early as in the 1980s, number of environmental NGOs was less than seven. But its number has grown in a phenomenal rate since 1988 (Goo DW, 1996:163-4). According to the Ministry of Environment (MOE), environmental NGOs are classified into three major categories: officially approved NGOs, non-official voluntary NGOs, and comprehensive NGOs (MOE, *Environment White Paper 1999*: 169). The number of officially approved NGOs, which are devoted solely to environmental activities with a high degree of professional competence and accountability, increased from 63 in 1992 to 119 in 1999. Non-official voluntary environmental organizations, which are geared toward social and political activism at the grass-roots level, have become most pronounced in terms of size and social impacts. Their number was 30 in 1992, but rose to 271 in 1999. Comprehensive NGOs refer to those NGOs which include environmental issues as a part of their catch-all agenda. Before the rise of specialized environmental NGOs, these comprehensive NGOs played an important role in attracting public attention to environmental causes (MOE, *Environment White Paper 1998, 1999*). Likewise, the quantitative expansion of environmental NGOs emerged as a new social and political deterrent to the dominance of the developmentalist coalition, leading to major changes in environmental policies and people's attitude towards development and environment.

Finally, the most significant impact of democratization on environmental politics was the qualitative change in environmental NGOs. They no longer remained as passive public interest groups. They have become larger in size, relatively rich in human and financial resources, and innovative in crafting new strategies and tactics of environmental movements. Table 3. presents a comparative overview of evolutionary dynamics of environmental politics in South Korea.

Evolution of South Korea's environmental politics can be categorized into four major stages (Jung and Lee, 1994; Goo, 1996; Son, 1996; Lee SJ, 1998). The first stage (1960-1970s) is the Park Chung-hee period during which environment movements were very much passive and primitive by paying attention primarily to compensation of victims. While the government was less attentive to environmental issues, being preoccupied with growth and exports, the public was also tolerant of environmental degradation. Moreover, the government tried to conceal environmental disasters and to repress all kinds of environment movements through authoritarian rule. It is so more because public attention was paid to the termination of authoritarian rule and democratic opening. Thus, environmental movements were confined largely to self-help movements of the victims who engaged in sporadic protests, but overall impacts of their movement were minimal during this period.

The second stage (1980-1987) involves an interesting convergence of democratic movements and environmental ones. During this period, political system was still authoritarian under the Chun Doo-hwan rule, but environmental NGOs began to emerge. They considered environmental movements as part of democratic struggle to topple the Chun regime. Thus, by forming an alliance with victims of

environmental accidents, these NGOs became more assertive in pushing for the government's policy change and securing compensation for the victims. Encountering this new challenge, the Chun government tried to pacify the situation in part through co-optation and in part through de-coupling of political and environmental issues. Despite the government's repression, however, specialized environmental activist organizations came into existence, and public attention including mass media became much more attentive to environmental issues during this period.

Table 3. A Comparative Overview of Environmental Movements in South Korea

| | 1st stage 1960s-70s | 2nd stage 1980-87 | 3rd stage 1987-1992 | | 4th stage after 1992 |
|---|---|--|--|--|--|
| | | Onsan Disease | Anmyeon Island | Nakdong River Phenol | Dong River Dam |
| Characteristics | Damage compensation | damage compensation | NIMBY | damage compensation | environment conservation |
| democratization (political system) | Pre (closed) | Pre (closed) | Post (open) | Post (open) | Post (open) |
| Main activists | Victims | Victims and environmental NGOs | Victims and environmental NGOs | Victims and environmental NGOs | Environmental, civil movement organization |
| Result | Minimum compensation | Relocation/compensation | No construction | Tolerable compensation | No construction |
| Goals | Damage compensation | Damage compensation | Damage prevention | Damage compensation and prevention | Damage prevention |
| Role of government | Tolerance of pollution | Damage compensation | Dual; preservation & development | Dual; preservation & development | Dual; preservation & development |
| Response of government | Concealment, suppress | Pacification | Reactive | Policy change | Policy change |
| Policy change | Sanitation law, Prevention of Pollution law (1963) environment conservation law (1977, comprehensive measure) | environmental rights included in the Constitution (1980) | Environmental measures on specific pollution medium (1990) | Environmental measures on specific pollution medium (1990) | Environmental measures on specific pollution medium (1990) |
| Organizational development of environmental administration⁴ | From pollution section in 1967 to pollution bureau in 1973 | 1980 Environment Administration established | 1990 upgraded to the Environmental Agency | 1990 upgraded to the Environmental Agency | 1994 upgraded to the Ministry of Environment |
| International NGOs' help | No | No | No | No | Yes |

⁴ See Yoon(1999) and Heo (1997) for details on the evolution of the Ministry of Environment from the powerless pollution section under the Ministry of Health and Society in 1967 to a powerful enforcement agency.

The episode of the Onsan disease incident, which was reminiscent of the Minimata Bay incident in Japan, is the case in point. As part of the heavy-chemical industrialization plan, the Park Chung-hee government created a special industrial complex in the Onsan area in the 1970s, where a large number of refinery, non-metallic, chemical industry plants were concentrated. Since the early 1980s, the Onsan coastal area fell prey to severe pollution. Lag time effects hit the area. Emission of heavy metal waste water and industrial fume began to pollute both air and the coastal area. Fish catch was drastically reduced, while residents of the area began to show collective symptoms of neuralgia and skin disease, which is known as the 'Onsan disease.' For two years between 1983 and 1985, more than five hundreds local residents were plagued by the disease. In 1985 the Korea Pollution Research Institute diagnosed it as 'itai-itai disease,' a bone and joint disease caused by cadmium poisoning, which was endemic to chemical industry areas in Japan.⁵

Local residents appealed to the government for relocation of polluting industries and proper compensation for the damages. Initial responses by the government were rather lukewarm and even negative. As the 'Onsan' disease attracted extensive media attention, however, environmental NGOs began to assist local residents in formulating strategies of protest, elucidating the causes of the disease, and even joining street protests with them. Facing this new development, the government took quick actions to control the damage and to prevent its spill over to the political arena. It announced a plan to relocate local residents to safer areas along with financial compensation. Such announcement severed ties between local residents and environmental NGOs. While the former was preoccupied with negotiating with the government over the acceptable level of financial compensation, the latter wished to prolong the struggle until the government comes up with structural remedies. Lack of unity between the two made the government a winner. They neither induced government's fundamental policy changes, nor secured satisfactory compensation package. Nevertheless, alliance between local victims and environmental NGOs opened a new chapter in environmental politics in South Korea.⁶

The third stage (1987-1992) is the take-off period of South Korean environment movements. Two events had greatly reshaped political terrain of environment movements during this period. While democratic transition in 1987 demolished political and institutional barriers to the activation of environment movements, the Rio Earth summit enhanced public awareness of environmental issues. During this period, environmental politics underwent four major structural changes. First is the proliferation of professional, competent, and specialized environmental NGOs. The government could no longer monopolize or manipulate knowledge and information on environmental issues. In addition, these organizations were well organized and funded, enabling their reach to a wide range of civil society in appealing to environmental integrity. Second was the changing attitude of victims of environmental hazards. In the past, they were preoccupied primarily with relocation and financial compensation. During this period, however, they began to show a greater degree of analytical aptness to environmental issues, and called for structural remedies and preventive measures on environmental hazards. Furthermore, they started to form an equal partnership with environmental NGOs. Third, defying the inertia of the developmentalist paradigm, mass media became much more attentive to environmental issues. Some media organizations began to lead public opinion by engaging in environmental campaigns by themselves. Finally, the government also became much more receptive to public pressures, partly because of democratic opening, and partly because of much more sophisticated strategies by environmental NGOs (Goo, 1995; Gang, 1997; Jung, 1994).

Such structural changes enhanced the bargaining edge of victims and environmental NGOs in dealing with the government. During this period, in fact, environmental NGOs and local citizens became quite successful in championing their causes over a wide range of issues involving nuclear waste disposal site, waste incinerator sites, a night-soil incinerator issue, and environmental degradation associated with the construction of golf courses. In this regard, two cases deserve special attention; one is public rejection of the Anmyeon Island nuclear waste disposal site construction, and the other is the incident of the Nakdong River Phenol pollution (see Table 3.).

In order to cope with chronic energy shortage, the South Korean government pursued an assertive nuclear energy program since the early 1970s. Consequently, nuclear waste disposal emerged as a new public policy problem. On November 3, 1990, the government's plan to build nuclear waste

⁵ See Goo (247) and Gang (1997:450).

⁶ See Goo (264-65) and Gang (1997:451).

disposal facilities in the Anmyeon Island, which is located at the west coast of the Korean peninsula, was leaked to mass media. Upon the news, over 20,000 local residents staged violent street protests, and destroyed police stations and government buildings. Chaos set in, and the government could not control the situation. On November 8, environmental NGOs under the leadership of the National Movement to Expel Nuclear Power Plant and college students joined local residents in opposing the government plan (*Choun Ilbo*, November 9, 1990). The situation got worse. Throughout the protests, they not only called for transparency and more democratic procedures in site selection, but also requested the government to reconsider its nuclear energy program. Finally, the Roh Tae-woo government made a formal announcement to scrap the plan, and minister of science and technology who was in charge of the project was dismissed. Local residents and NGOs won, and the government lost the battle. Obviously, the incident epitomized a newly emerging 'not-in-my-backyard (NIMBY)' syndrome. Nonetheless, it offered a new momentum in the history of environmental movements in South Korea. The triumph of local residents and NGOs over the Korean government critically undermined its governability, producing bandwagon effects on other pending issues. Moreover, it was the first preventive and proactive action. Most importantly, the success in the Anmyeon Island strengthened organic ties between environmental NGOs and local residents. The Korean government, which was known for its strength and autonomy, fell prey to newly emerging environment movements and collective egoism of locality.⁷

The incident of Nakdong River phenol emission also presents a changing social and political ambience during this period. In March 1991, residents in Daegu city, the third largest city in Korea, encountered distasteful smell from tap water. Water supply authorities traced the origin of the smell. It resulted from synergy of chloroform and phenol. Chloroform was routinely used in purifying tap water, and the problem was phenol. It was discovered that the Doosan Electronic Company released over 30 tons of phenol liquid into the Nakdong River without purification. The phenol release victimized all the residents, farmers, and fishermen along the Nakdong River, and the entire nation was outraged. Environmental NGOs and consumer groups instantly organized a Doosan phenol incident investigation team, and staged a nation-wide boycott of products from the Doosan Group which ranged from beer, milk, and ginseng tea to electronic goods. Group's sales cut almost by half less than a month (*ChosunIlbo* March 26, 1991). Mounting public outrages fostered both the Doosan Group and the government to come up with remedial measures. While the Doosan Group pledged to contribute 20 billion won as a fund for cleaning environment along with an official apology from its chairman, the government also announced a comprehensive policy package to ensure clean water. Organizational power of environment NGOs and public responses shown during the phenol incident was an eloquent witness to changing facets of environmental movements in South Korea. Indeed, the phenol incident was the watershed in the history of environmental politics in South Korea, not only because of its magnitude, but also because of its educational impacts on environmental hazards.⁸

The fourth stage (since 1992) can be characterized as the period of maturation. Since the Rio Earth summit in 1992, environmental NGOs have proliferated. And they began to form national alliances by creating organizational networks between those NGOs in Seoul and local areas. More interesting is the formation of international alliances (Bramble and Porter, 1992:314). While domestic environmental NGOs began to extend their interests in global environmental agenda by going beyond national boundary, international environmental NGOs also got interested in working with Korean counterparts. Along with this, operational mode of South Korean NGOs has undergone structural changes from protest and opposition to policy consultation with the government. The proactive change was closely tied to their increasing policy competence and shifting emphasis from damage control and compensation to preventive policy measures. South Korea's environmental politics has gradually evolved from the politics of confrontation to that of compromise through exchange of ideas and knowledge, revealing its maturity comparable to advanced industrialized countries.⁹

⁷ There were many instances of NIMBY phenomena. They include Goosan Dongyang's Chemical TDI Corporation in 1989; Boosan industrial waste landfill, Oosan, Yeongduk and Anmyeon Island nuclear waste disposal facility in 1990; and Kimpo solid waste disposal facility in 1991 (Jung, 1994).

⁸ According to a survey by the Green Korea United's (one of the most activist environmental NGOs in Korea), the Nakdong River phenol incident was ranked as the most serious environmental hazard in South Korea (www.greenkorea.org/news/release/0907.htm).

⁹ See Goo (1996) and Son (1996).

As in Table 3, a recent movement against the construction of multipurpose dam in the Dong River presents the hallmark of environmental politics. Seoul metropolitan city with more than 12 million population has suffered from a chronic fresh water shortage. As a way of resolving the water shortage as well as managing flood problems, the Ministry of Construction and Transportation and the Korea Water Resources Corporation decided to construct a multi-purpose dam in the Dong River in 1996. Its planned completion date was 2001. But the plan had problems from the beginning since it failed to satisfy environmental impact assessments required by the Ministry of Environment (MOE). A coalition of environmental NGOs, various civic groups, and local residents formed National Citizens' Solidarity to Preserve the Dong River, and unfolded a nation-wide campaign to boycott the government plan for the reason of natural conservation. Mass media took side with the citizen movement, and general public were also critical of the government plan. In addition, on April 20, 1999, international environmental NGOs such as Green Peace, the Sierra Club, Friends of the Earth, and the World Watch Institute issued a special resolution supporting the national campaign, "Save the Dong River."¹⁰ The Kim Dae-jung government faced a serious dilemma between resolving the fresh water problem and protecting properties of Seoul residents from flood on the one hand and saving the Dong River on the other (*Chosun Ilbo*, April 8, 1999). Extensive public debates took place between government officials and NGOs' representatives. NGOs also sent their own technical expert teams to make impact assessments. After going through the process, president Kim Dae-jung announced the cancellation of the plan. Civil society won over the government without even engaging in any violent demonstrations. Public opinion, knowledge and information, and international pressures made it happen.

In view of the above, democratic changes have brought about profound changes in South Korea's environmental politics. Vertical decision and command, exclusion of the popular sector, and unilateral imposition of government policies, which were defining characteristics of the developmentalist state, are no longer possible. Logic of persuasion with knowledge and information, winning public minds, and mobilization of domestic and international pressures have emerged as new determinants of environmental politics in South Korea. Indeed, democratization has fostered the demise of the developmental coalition, while enhancing the power and influence of environmental NGOs.

IV. Paradoxes of Globalization and Environmental Politics in South Korea

Insomuch as democratization has influenced the dynamics of environmental politics, globalization has also affected its nature and direction. Globalization has several meanings (Prakash and Hart, 2000; S. Kim, 2000; Moon, 2000a; Moon, 2000b), but it can be operationalized in terms of three types. The first type is spontaneous globalization which refers to a growing interdependence evolved through expanding market networks and revolution in transportation and communication. It is a kind of natural evolutionary dynamics resulting from progress in human history. The second type is governed globalization which denotes international efforts to foster or regulate the process of spontaneous globalization through multilateral coordination and cooperation. Governed globalization usually entails international regulatory regimes. The last type is managerial globalization which can be defined in terms of government's conscious efforts to cope with opportunities and constraints emanating from the first two types of globalization. In other words, managerial globalization can be seen as state's strategic responses to external stimuli.

With regard to environment, these three types of globalization produce a structure of paradoxes. While spontaneous globalization compels countries to loosen environmental regulations in order to attract more foreign capital, so that they can enhance international competitiveness (Porter, 1999:136)¹¹,

¹⁰ <http://www.kfem.or/krem/donggang/course.htm>

¹¹ There is a contrasting view about pollutant haven. Pollution haven phenomena have not been found worldwide (Adams, 1997; Jones, 1997; UNCTD, 1999). Mani and Wheeler (1998: 244) explains the reasons; "(1) consumption/production ratios for dirty-sector products in the developing world have remained close to unity throughout the period; most of the dirty-sector development story is strictly domestic; (2) a significant part of the increase in dirty-sector production share in the developing regions seems due to a highly income-elastic demand for basic industrial products. With continued income growth, this elasticity probably has declined; (3) some portion of the international adjustment probably has been due to the energy price shock and the persistence of energy subsidies in many developing

governed globalization urges countries to comply with a set of norms, principles, and rules regarding environmental regulations. State authorities have mandates to balance the two. Such balancing acts are usually shaped by dynamic interplay of international and domestic forces. In the case of environment, transnational alliances factor in too; while developmentalist coalitions comprised of national and international capital push for lowered environmental regulations in favor of creating pollutant haven, domestic and transnational environmental NGOs as well as international organizations become counter-balancing forces. In many cases, state choice of environmental policy is by and large a reflection of this coalitional politics.

South Korea is not an exception to this general observation. It went through a severe economic crisis in 1997, which was a very much product of spontaneous globalization (Moon 2000a; Moon and Mo, forthcoming). In the process of overcoming the financial crisis, the South Korean government and firms were forced to compromise some of environmental regulations. As a matter of fact, since the crisis, government spending on environmental improvement has decreased. Relative share of the Ministry of Environment (MOE) budget in total government expenditure declined from 1.51 percent in 1997 to 1.3 percent in 1998 and 1.36 percent in 1999 (Kim, 2000; *Environment Whitepaper* 1998, 1999). Although the reduction has been minimal, the trend seems problematic. It is so precisely because both president Kim Dae-jung and his predecessor Kim Young-sam pledged to pay utmost policy attention to environmental issues during presidential election campaigns. Their pledges have not come true.

The private sector has been particularly vocal about loosening of environmental regulations. Immediately after the economic crisis, the Federation of Korean Industries, the peak organization representing interests of big business, called for relaxation of rigid environmental regulations in order to correct economic structure based on high cost and low efficiency (*Donga Ilbo* November 25, 1997). MOE has responded favorably to the demands of the private sector by pledging to remove 193 regulations (30 percent of total regulations) and loosen 185 regulations (28.8 percent). The MOE decision was motivated by the mandate of promoting economic recovery through the relaxation of environmental regulations (*Hangyerae Shinmun*, December 15, 1998). The primacy of economic recovery over environmental preservation is also well reflected in investment behavior of private firms. In 1996, a year before the economic crisis, thirty top leading manufacturing firms in the areas of petro-chemical, steel, cement, pharmaceutical, electronics, computer, automobiles, and telecommunication industries invested 1.66 trillion won in environmental facilities. But in 1998, they invested only 424 billion won in environment-related facilities, which accounted for only 25 percent of the 1996 figure (Kim Takyun, 2000).

Likewise, economic disaster triggered by spontaneous globalization has compromised democratic and even global mandates of environmental protection to a great extent. But governed globalization has emerged as the primary deterrent to this trend. The first source of international pressures is the World Trade Organization (WTO). Since the Stockholm declaration on Human Environment in 1972, the GATT and later WTO began to pay a serious attention to relationships between trade and environment. In particular, the Rio summit played an instrumental role for establishing the Committee on Trade and Environment (CTE) within WTO, which is designed to harmonize trade liberalization and environmental conservation. In December 1996, WTO ministerial meeting which was held in Singapore, began to deliberate on ten major agenda (see appendix 1), but failed to produce major agreements. Depending issue areas, WTO members took conflicting positions. The third WTO ministerial meeting held in Seattle in November, 1999, also failed to produce a major consensus on the agenda partly due to protests by environmental NGOs and partly due to conflicting interests among its members. Since WTO/CTE failed to produce enforceable codes of conduct on harmony between trade liberalization and environmental conservation, South Korea has not so far encountered any visible pressures. However, once the Green Round gets launched, and its pressures increase, the South Korean government might have to undergo serious structural changes.

In the case of South Korea, OECD became a more credible source of international pressures for environmental conservation and integrity. South Korea joined OECD in 1996. In order to be eligible for an OECD membership, South Korea had to comply with 171 rules of which 71 are related to environmental

countries. These subsidies have been on the wane for a decade; (4) environmental regulation increases continuously with income and seems to have played a role in the shift from dirty to cleaner sectors.”

conservation. OECD rules on environment are quite comprehensive. They cover a broad range of environmental issues such as chemical materials, solid waste disposal, environmental policy, environmental impact statement, air quality, and water quality. And OECD codes of conduct on environment are composed of decision which obligates its members to comply with, recommendations, and declaration. 71 environmental codes can be re-categorized into 65 codes. South Korea agreed to accept 53 codes upon the admission to OECD. South Korea accepted the remaining 12 codes with observation (*Earth Environment Information*, vol. 13, November 1996). In tandem with the admission to OECD, South Korea overhauled the environment related legal system which incorporated polluter pays principle, utilization of economic instruments in environment policy, prohibition on environmental countervailing duties and export rebates, and implementation of environmental impact assessments. According to an OECD evaluation, South Korea still lags behind its standards in the areas of air quality, water quality, management of solid wastes disposal, and transportation. But OECD has become a major driving force of changes in environmental policies in South Korea (Ministry of Foreign Affairs, "Report on Earth Environment Conference" April, 1997.)

The final source of international pressures is various kinds of multilateral environmental agreements (MEAs). South Korea has joined 49 out of 210 international conventions on environment. They include the UN Framework Convention on Climate Change, the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (*Environment Whitepaper* 1999:581). These MEAs have influenced the South Korean government to enhance its environmental standards in one way or another. Of course, many of these conventions are rather weak in terms of enforcement. Recommendations, rather than obligations, characterize the governance structure of these conventions. Nevertheless, they have been effective in altering South Korea's compliance behavior.

What has been problematic with South Korea is its changing status in the international economy. With the admission to OECD, South Korea can no longer enjoy the status of developing country, and as a developed country, it is expected to meet much higher environmental standards. For example, in accordance to the Kyoto declaration, 38 advanced industrial countries have agreed to reduce emission of greenhouse gases by an average of 5.2 percent during 2008-2012 by using 1990 as the benchmark year. South Korea as an OECD member, is also obliged to comply with it. However, meeting such standard could be extremely expensive. If South Korea has to freeze emission of greenhouse gases at the level of 1995, its economic losses are estimated to increase from 1.3 percent of GDP (about 15 trillion won) in 2020 to 3.6 percent of GDP (about 62 trillion) in 2030 [Hong, 2000 (<http://www.mofat.go.kr/main/top.html>)]. Being aware of such high costs, South Korea has been reluctant to comply with the decision. Apart from the case of greenhouse gases, South Korea ratified the Vienna convention and the Montreal protocol on the ozone layer in May 1992, which identified 95 types of substances including CFCs and Halon that deplete the ozone layer and obligated South Korea to make a gradual reduction of their production and consumption. By 2040, South Korea is expected to make a complete ban on both production and consumption of these materials. Such regulations are also likely to constrain its economic activities.

In sum, globalization has brought about mixed impacts on development and environment in South Korea. While elements of spontaneous globalization have favored development and international competitiveness, a set of norms, principles, and rules defined by governed globalization have fostered the adoption of global environmental standards. The South Korean government has been so far sandwiched between the two. Although it has accommodated a large number of international conventions, their enforcement has been by and large lagged behind because of institutional and mental inertia as a developing country. Unless the mismatch of domain between the two is structurally resolved, South Korea is likely to go through erratic policy behavior in enforcing global environmental standards.

V. Conclusion

In view of the above discussion, South Korea has undergone a dramatic change in the area of environmental politics. Defying the previous dominance of the developmentalist coalition, democratic opening and consolidation has not only expanded civil society, but also proliferated environmental NGOs. NGOs have in turn become the most significant political actor in terms of size, resources, expertise, and

political activism. Meanwhile, globalization has resulted in a paradoxical outcome where forces of both developmentalist and conservationist coalitions are complicatedly intertwined. Future terrain of environmental politics in South Korea is dependent on how the state can weave through these paradoxes and underlying dynamics of coalitional politics. In our opinion, however, resurgence of the developmentalist ethos is temporal, being associated with the acute economic crisis in 1977. As South Korea normalizes its economic scene, alliance between domestic and international NGOs, both of which are being inspired and supported by new emerging global environmental regimes, is likely to prevail over the developmental one in shaping environmental politics in South Korea.

This is a positive development. But several caveats are in order. First, South Korea is still in the twilight zone of two competing dominant social paradigms, developmental vs. conservationist one. Its environmental politics might encounter difficulties unless it realigns the dominant social paradigm. Spread of post-materialist values has been confined mostly to intellectuals. New efforts should be made to spread the messages of post-materialist values to a wide segment of Korean society. Second, environmental NGOs in South Korea need to restructuring their goals, strategies and tactics, action programs, and organizational structure. Despite their remarkable contribution in the past, they have often been criticized of being organizations which engage in 'civil movements without grassroots.'¹² And they have also been occasionally accused of being detached from reality by becoming too much militant and politicized rather than by serving as reservoir of policy ideas and alternatives. Their restructuring should be framed around inducing more grassroots to get involved and generating more innovative policy ideas. Third, South Korea NGOs should be more active in forming transnational alliances with international NGOs. Events-oriented alliances aimed at generating short-term demonstration effects cannot produce long-lasting impacts on environmental policy and politics. Emphasis should be given to exchanges of ideas and information on policy, organization and education. Finally, the Korean state should overcome the bureaucratic inertia anchored in the developmentalist template. It should be more proactive than reactive in enforcing international environmental conventions. Otherwise, real changes in environment policy cannot be anticipated.

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¹² See Kim and Kim (1999).

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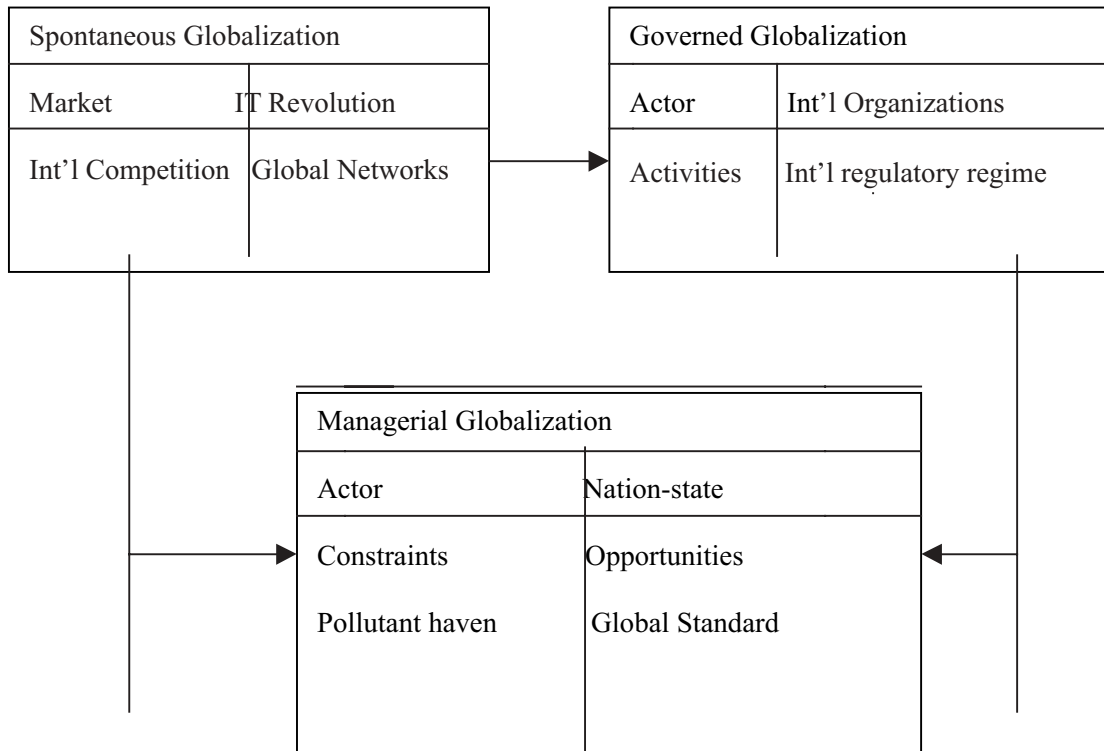
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Appendix. CTE Agenda

| | Items | Main Issues |
|-----------|--|---|
| Agenda 1 | Trade rules, environmental agreements, and disputes | The relationship between the rules of the multilateral trading system and the trade measures contained in multilateral environmental agreements (MEAs), and between their dispute settlement mechanisms |
| Agenda 2 | Environmental protection and the trading system | The relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system -Trade-related environmental policies: subsidies -The environmental review of trade agreements |
| Agenda 3 | How taxes and other environmental requirements fit in | The relationship between the provisions of the multilateral trading system and: (a) charges and taxes for environmental purposes; and (b) requirements for environmental purposes relating to products, such as standards and technical regulations, and packaging, labelling and recycling requirements. |
| Agenda 4 | Transparency of environmental trade actions | The provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes |
| Agenda 5 | The relationship between the rules of the multilateral trading system and the trade measures | The relationship between the rules of the multilateral trading system and the trade measures contained in multilateral environmental agreements (MEAs), and between their dispute settlement mechanisms. |
| Agenda 6 | Environment and trade liberalization | The effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and the environmental benefits of removing trade restrictions and distortions |
| Agenda 7 | Domestically prohibited goods | The issue of exports of domestically prohibited goods (DPGs), in particular hazardous waste |
| Agenda 8 | Intellectual property | The relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) |
| Agenda 9 | Services | The work programme envisaged in the Decision on Trade in Services and the Environment |
| Agenda 10 | The WTO and other organizations | Input to the relevant bodies in respect of appropriate arrangements for relations with intergovernmental and non-governmental organizations (NGOs) |

Source: http://www.wto.org/english/tratop_e/envir_e/cte00_e.htm

Figure 1. Globalization and Environment





Land reform and sustainable development in South Africa

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Noragric

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Outline

- The current status of land reform in South Africa
- Standard narratives on land reform in southern Africa
- A critical view on these narratives
- Main arguments



The current status of land reform

- Restitution
- Redistribution
- Tenure reform



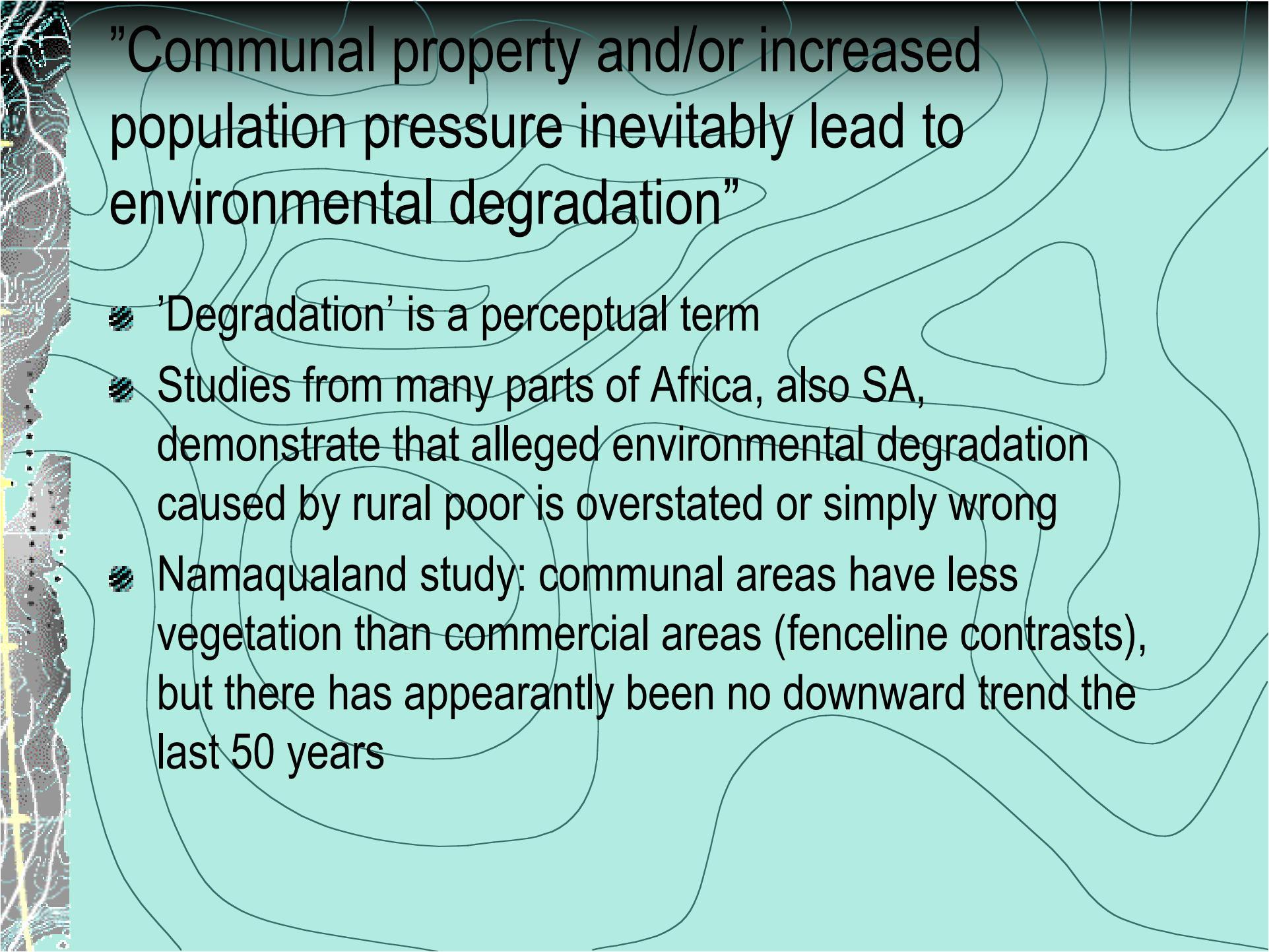
Standard narratives on land reform in southern Africa

- "Radical land redistribution will wreck the national economy"
- "Communal property and increased population pressure leads to environmental degradation"



”Radical land redistribution will wreck the national economy”

- 20 % of commercial farms contribute 80 % of the export earnings from agriculture
- Much of the commercial farmland lies idle or is underused
- Research from East and southern Africa show that there may actually be an inverse relationship between farm size and efficiency
- Namqualand study (livestock production) indicates a higher output per ha on communal land than on commercial land



”Communal property and/or increased population pressure inevitably lead to environmental degradation”

- 'Degradation' is a perceptual term
- Studies from many parts of Africa, also SA, demonstrate that alleged environmental degradation caused by rural poor is overstated or simply wrong
- Namaqualand study: communal areas have less vegetation than commercial areas (fenceline contrasts), but there has apparently been no downward trend the last 50 years



Main arguments

- Land reform is central to sustainable development
- Land redistribution should not be a threat to the national economy, - it may even increase land use efficiency
- Environmental sustainability should not be seen as an obstacle to land redistribution
- But land reform should be seen within a wider context of rural development

The Interpretation of Poverty and Environmental Degradation- Does it Lead to Conflicts of Strategy between International NGOs and Local Community Based Organizations in the South?

Paul Opoku-Mensah
ISS-NTNU / SFU-UiB

The Poverty-Environment Problematic: INGOs and SNGOs

OBJECTIVES

- Differences in Problem Definition?
- Differences in the Conceptualization of Solutions?
- Different Strategies?
- So What?

The Poverty-Environment Problematic: INGOs and SNGOs

PROBLEM DEFINITION

- **Responsibility:** SNGOs do not want poverty to be held responsible for global environmental degradation
- **Efficiency:** Argue that a more efficient solution to the environmental crisis is consumption control in the North
- **Efficacy:** Believe that poverty reduction remains a necessary condition for efficacious environmental protection
- **Additionality:** Are weary of the environmental priorities of INGOs distracting international funds from poverty reduction goals of the South;
- **Sovereignty:** Resent the usurpation or challenge of their national leadership (sovereignty) over Poverty and Environment issues in the South.

The Poverty-Environment Problematic: INGOs and SNGOs

STRATEGIES (I)

■ International NGOs

- Conservation
- Policy Advocacy
- Public Education
- Protest

■ Southern NGOs

- Poverty Reduction Programs
- Integrated Projects (rather than pure conservation)
- Limited Policy Advocacy
- Public Education, albeit Limited

The Poverty-Environment Problematic: INGOs and SNGOs STRATEGIES (II) OPTIMAL SOLUTION

- **Responsibility:** Where INGO assistance is built, not on the implicit rationale of blaming the 'poor' but on shared responsibility for a global problem.
- **Efficiency:** Where environmental protection by the poor in the South are complemented with equally comprehensive consumption control measures in the North.
- **Efficacy:** Where the focus is not so much on the *means* of protecting the environment (i.e., the hardware: conservation materials) as with the *reasons* to conserve the environment (i.e., the soft ware: development/poverty reduction).
- **Additionality:** Where increased international support is provided as assistance, not as conditionality, and does not detract resources from other developmental priorities; and
- **Autonomy:** Where INGOs strategy implies no more than providing assistance for SNGO programs, designed and carried out entirely according to national priorities, with no implicit or explicit interference in policy design or implementation.

Ten Years after Rio: What have We learnt from NGOs?

- SD proven a powerful (normative) concept for North-South Links
- The priorities of the North have dominated but Synergies of Interest as well as Resource and Power Issues have prevented 'open' conflicts
- Cracks Emerging: NGO Forums as public apologia for domestic discord?
- Don't Blame NGOs: It's the 'System.'
- Challenge for Johannesburg?: Rethink the SD Debate!

The importance of active and good NGOs for the environment and development

By Arvid Solheim, Director of the Development Fund.

Civil society as a whole is important to the protection and sustainable management of the environment in the South.

This means a free press, an informed and committed population, grassroots organizations, "expert" organizations, democratic institutions, free trade-union movement, and a private business sector looking beyond profit.

The situation faced by civil society in many poor countries is an uphill struggle. Public-sector institutions and legislation tend to be inadequate. There is no regular funding system, security concerns may apply, and political or social polarization may seriously impede the formation of broad organizations and alliances. With regard to the environment, the knowledge of international regulations, such as the Biodiversity Convention and the Desertification Convention, is often very deficient.

National entities meant to supervise these rules are under heavy pressure from private interests in pursuit of dam-building, logging concessions, emission permits or other kinds of natural resource exploitation without regard for sustainability.

Neither the authorities nor the organizations are able to obtain significant support from multilateral organizations such as the UNEP, CSD or the conventions' secretariats.

Other civil-society actors often have little capacity, a shortage of funding and professionals. Likewise, a heavy responsibility rests upon environmentally aware people, who can be found both in the urban elite and in the countryside among those who see their basis of natural resources being threatened or ravaged by external forces. Organizations such as Friends of the Earth, Greenpeace and consumers' rights organizations are doing a great job in the North, but similar outfits are found wanting in many countries in the South.

So what is the role of international environmental and development NGOs?

The international NGOs' job is first and foremost to strengthen civil society. In many cases and situations, it is also appropriate to work directly towards local self-management, for instance by raising qualifications in the public sector, offering advisory services, etc.

There are several major tasks, though they can be classified and placed in order of priority as follows.

- Funding the work of NGOs in the South. It is often most useful and cost-effective to provide so-called core funding, which allows the recipient organization to build its own capacity, to be operational in the field and to carry out professional and political work with relative financial stability and predictability.
- Capacity-building in areas such as administration and planning, organization-building, management, fundraising and outcome analysis.
- Creating contacts and producing information, including South-South exchange and documentation.
- Contributing to the debate and point out potential threats, involving partners from the South in professional and political discussions and in work with international or North-South perspectives.
- Speaking up for forces in the South who want and need international support (say, if transnational corporations exert pressure on national authorities to, for example, allow overexploitation of natural resources or other environmentally harmful steps).
- Engaging actively in policy-making and lobbying in our own country as well as in international forums in order to generate greater understanding of the views of partners in the South and put the spotlight on, for instance, the adverse impact on poor people's living conditions caused by the

increasing liberalization of world trade. This covers the intense endeavor to stop the spread of GMOs and oppose international regulations allowing patents on life.

- International NGOs should be gradually stepping back from the operational role in projects in the South and from service delivery. The exception is relief aid and action in special situations of crisis.

The role of national-level NGOs in the South

- They must be watchdogs! For a host of reasons, as briefly referred to above, there is great pressure on the authorities and communities in the South caused by various commercial interests, which do not necessarily adhere to democratic rules. Civil society, i.e. the organizations of the local population, must pay attention to what is going on and what is being planned, making their objections heard whenever required.
- Acquiring and maintaining professional capacity on environmental issues and on the overall context influencing the poverty trends in the country.
- Active pursuit of policy-making and lobbying at the national level and in international forums, concerning environmental as well as socio-economic issues.
- Keeping international contacts providing inspiration, information and tools.
- Mobilizing the local and national population around issues related to national (re)construction, sustainable management of natural resources, local participation in national decision-making processes, just to mention a few. It will always be necessary to build broadly based membership organizations with dynamic internal discussions. It should be remembered that NGOs are composed of voters.
- Raising international and national funding of environmental-management measures, lobbying and environmental education.

Interaction or conflict between international and national NGOs?

The most frequent divide is between organizations with different fields of interest or objectives. National NGOs with poverty relief as their primary mission may clash with the interests of “Northern” NGOs dedicated mainly to worldwide nature conservation.

This area has undergone substantial progress, partly by means of international environmental organizations adopting a more holistic approach to issues of the environment and nature in the South, and not least as today’s “Northern” organizations are working much more than previously through local/national organizations, which are better placed to see the issues of environment and resource management within a national context.

Development NGOs in the South have also taken on a more holistic outlook in many cases. Economic development is no longer the sole objective, as concepts such as long-term sustainability and natural resource management are coming increasingly to the fore.

A threat is posed by transnational corporations, which are succeeding in influencing NGOs and POs (people’s organizations) through massive (dis)information campaigns, where international representatives/NGOs with different views, counter information or alternative solutions fail to make their mark due to outright obstruction by (corrupt) national authorities invoking respect for national integrity/sovereignty.

The guarantee for:

- a lively and healthy environment,
- conservation of, and access to, nature for present and future generations, and
- sustainable economic development for the benefit of the entire population,

is:

a vigorous, diverse and well-informed civil society.

The best channel of civil-society strengthening in the South goes through contact with, and support from, like-minded foreign civil-society organizations, North as well as South, which have the capacity and competence still missing in a series of countries. This applies particularly to poor countries with poor governance and little popular participation in the decision-making processes.

The Development Fund's aim is to contribute to sustainable development in the intersection between economic growth and conservation of the environment and nature. This will always be done in cooperation with local partners within relationships spanning many years. The objectives are based upon the aforementioned principles, and are fleshed out in close dialogue with the partners.

Examples

Relief Society of Tigray, (REST) has received support from international aid organizations since the civil war in the 1980s. Today, they are carrying out important work throughout the region in the areas set out below.

- *Rehabilitation of natural resources and environment on a vast scale, with thousands of acres recovered from a seriously advanced state of erosion and soil degradation.*
- *Greater food security by setting up a network of local seed banks, agricultural guidance, improved breeding material for large livestock, small-scale irrigation, etc.*
- *Stronger local democracy, mainly through close cooperation with the so-called baito system, which is an advanced yet traditional system of decision-making and representation in the Tigray region.*

Green Movement of Sri Lanka

is a relatively young organization, but with more than 60 member organizations, it gathers practically all entities working for the country's environment and development.

- *Running a number of campaigns in order to influence the authorities on environmental issues such as dam building, thermal power stations, motorways, etc.*
 - *Actively involved in capacity building of member organizations.*
 - *Intense activities of policy formulation and advocacy both nationally and internationally in areas such as patents on life, food sovereignty and establishment of national parks.*
 - *Used by the authorities for courses and programs aimed at building capacity among local and regional environmental officers.*
-



"Never doubt that a small group of thoughtful, committed citizens can change the world, indeed it's the only thing that ever has".

(Margaret Mead.)

**Session 5: What is the role of knowledge in
sustainable development?**

**Poverty and the Environment – National conference on sustainable development,
Oslo, 6. and 7. March, 2002**

**Knowledge regarding pollution, technological solutions and political actions
– experiences from Russia.**

B. Salbu, Isotope Laboratory, Agricultural University of Norway, 1432 Aas, Norway

Summary

The long-term impact of artificially produced radionuclides on man and the environment has become an issue of major concern internationally, especially after the Chernobyl accident. Radionuclides released during nuclear events such as atmospheric nuclear weapons tests, nuclear accidents (e.g. Chernobyl accident) or as effluents from reprocessing plants (e.g. Sellafield, UK; Cape la Hague, France, Mayak PA, Russia) have affected ecosystems globally or regionally, while underground weapon tests, accidents with satellites (Canada), aircrafts (Greenland, Spain), submarines (Komsomolets), and leakages from dumped nuclear waste have a more local impact. Furthermore, there are a significant number of potential sources, which may contribute to release of radionuclides in the future. The Three Miles Island accident demonstrated that unlikely accidents might occur. The Chernobyl accident showed that the impact of a severe accident could be more serious than previously assessed. September 11th implied that the “worst case scenarios” previously assessed need to be reevaluated.

Artificially produced radionuclides released to the environment from nuclear weapon production and civil use of nuclear energy are the result a consequence of political (strategic, military and economic arguments) decisions. Furthermore, such decisions were also made with respect to applied nuclear technologies and safety aspects, and nuclear reactors within the former Soviet Union were built without containment. Following accidental releases, impact assessments require knowledge on:

- source term characteristics contributing to contamination of ecosystems,
- mobility, biological uptake, and ecosystem transfer under relevant climatic conditions e.g., process dynamics, uptake mechanisms, and food-chain transfer.
- bioaccumulation, short and long term biological effects on man and the environment.

Impact assessments, the ALARA principle and international conventions form the scientific fundament for political decisions associated with dose limits, action levels and implementation of countermeasures such as evacuation, relocation, food restrictions, as well as long-term remediation of contaminated ecosystems. Until recently radiation protection focused on man only. There is international consensus that protection of the environment should be included (Norwegian Radiation Protection Law, 2000) and that a radiation protection system for the environment is required. To establish a radiation protection framework, however, scientific documentation on dose-effect relationships for different biological endpoints is necessary. Thus, science and technology are essential for political decisions—statutes, regulations, framework and authorization—associated with contaminant releases. Furthermore, it is realized internationally that environmental science is increasingly important due to the fact that environmental issues such as nuclear accidents or the uncontrolled proliferation of nuclear material may seriously threaten the stability and security of a sustainable society.

The present paper will focus on radioactive contamination associated with the Chernobyl accident, dumping of nuclear waste in the Kara Sea and at Mayak PA, i.e. work performed under the auspices of the Russian-Norwegian Commission for environmental co-operation.

Poverty and the Environment: National Conference on Sustainable Development

6-7th March 2002

How can different knowledge systems and technological solutions contribute to combating poverty and at the same time take account of environmental considerations?

David Stephens
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Introduction

Though a great deal has been written about development theory and the success, and more often than not, the failure of development in practice, the part played by knowledge systems in the processes of development has been largely neglected.

This paper will attempt to redress this situation by critically examining the role of Western and local knowledges – and the plural is important here - in the processes of development, drawing on the author's thirty years of involvement in development in the South.

The paper is in three parts:

In the first – *knowledge as discourse* – attention will be given to problematising the very nature of knowledge and the legitimation of a dominant global knowledge paradigm. Taking as a starting point, 'Who defines, who decides?' we will examine relationships of knowledge and power and the practical consequences for the development of authentic alternative local knowledges.

Particular attention will be paid to the dominance of a Western scientific discourse or 'new orthodoxy' on environmental and poverty studies, and calls for the democratisation of expertise in the definition of environmental issues and problems.

Part two – knowledge as practice – will develop the argument by contrasting traditional views of the relationships between abstract knowledge or theory and practice or action i.e. ideas developed in one place and applied in another, with an approach in which knowledge is operationalized as 'knowing'; what Hobart (1993) defines as, "a practical, situated activity, constituted by a past, but changing, history of practices."

To illustrate such an approach reference will be made to the speaker's involvement in the development of Action Research in educational and research projects in the South.

Part three – *knowledge as praxis* – will tackle the question of the evaluation of the efficacy of knowledge or 'knowing systems'. Drawing on Freirean ideas of the development worker as a reflexive practitioner we will argue for a much more critical view of the relationship between the sources of knowledge we draw upon in development work and how we position ourselves and others in relation to that knowledge and work.

Particular attention will be given to methods of training, such as *Participatory Learning and Action* (PLA), which aim to encourage more democratic and reflexive work.

Part One: Knowledge as discourse

On October 1st 1996 James Wolfensohn, President of the World Bank, in discussing the future of his own institution declared, 'We need to become, in effect, the Knowledge Bank' (King, K 2001). His organisation then went on to establish at least ten, what have been called, 'K-Projects' from the 'Global Development Learning Network' to the African Virtual University. Knowledge it would appear has become the new mantra as development agencies and lending organisations wrestle to reconfigure themselves in the light of a pretty dismal record in alleviating poverty and reducing the gap between rich and poor.

However when we talk about knowledge or knowledge systems it is important to be clear what we mean by 'knowledge' and, in particular, its relationship to organisations such as the World Bank.

The view of knowledge as discourse provides us with a useful starting point. As Leach says,

'... the notion of discourse draws attention to the ways that particular ideas come to embody relations of power, and reproduce them. It emphasises that power and knowledge have real practical consequences.' (Leach, M 1998)

For Foucault (1972) too,

'the criteria of what constitutes knowledge, what is to be excluded and who is designated as qualified to know involves acts of power'

'Power, exclusion and qualification' raise a number of questions about the nature of the knowledge paradigm that lies at the heart of our development work: the current dominant, powerful discourse, shaped by institutions such as the World Bank, is very much one characterised by a Western hegemonic set of ideas – reductionist, positivist and global with the twin concepts of economic growth and capitalism an unquestioned part of this new orthodoxy.

Opposition to this dominant set of ideas about knowledge comes in a variety of forms from the anti-capitalist protests witnessed at recent World Trade Organisation meetings to groups promoting indigenous knowledge and causes ranging from eco-feminism to Green Peace activism.

This 'alternative' discourse is also problematic however as they in themselves can be seen as defined by the dominant global discourse, having developed in opposition to it.

What we have, if we are not careful, therefore is a dominant and alternative discourses both defined and articulated (and powerfully controlled?) by actors and activists in the North.

If we are seriously to harness 'different knowledge systems' in our drive to reduce poverty and support the environment then it means not simply recognising the legitimate role and function of Southern knowledge bases, be that local or indigenous, but the role those knowledge bases have in the setting of the development agenda.

Part two: Knowledge as Practice

A fundamental of Western knowledge systems is the idea of knowledge – rational, neutral, ‘out there’ being good in its own sense – what is interestingly called ‘pure’ as opposed to ‘applied’ knowledge.

For the development worker however it is ‘useful’, contextually situated knowledge that is surely of greater value in the solving of the world’s problems?

Anthony Giddens (1979, 1984) and Pierre Bourdieu (1977, 1990) both argue that action and agency are central characteristics of a ‘knowledge as practice’ interpretation of the ‘pure-applied’ dimension; in other words it is not a matter of applying theoretical ideas in a particular context but rather legitimating knowledge generation *in situ*.

Practical knowledge therefore becomes a far more dynamic activity: the expert with knowledge becoming the ‘knower’, knowledge becoming ‘knowing’, and contextualized, situated knowledge the norm.

The development of development research and evaluation methodologies such as Participatory Action Research (PAR) and Participatory Learning and Action (PLA) are examples of approaches in which knowledge generation and professional practice are viewed as mutually coexisting and reinforcing, and importantly. Such approaches tend also to emphasise the *process* of knowledge generation over the accumulation of knowledge and as such lend themselves to a more pragmatic and flexible *use* of knowledge.

Part Three: Knowledge as praxis

If knowledge is about power and agency then it is surely also centrally concerned with transformation and reflection, or *praxis*, defined by Paulo Freire as,

‘activity consisting of action and reflection ...it is transformation of the world’.
(Freire, P 1970)

Such reflection, or what Freire calls, ‘cultural action’ is concerned with the relationship between knowledge and one’s own material existence. Reflexivity, like knowing, entails entering into a critical dialogue with the knowledge process of which oneself and one’s work are central actors.

For the development professional the knowledge as praxis dimension means taking a critical, evaluative stance towards not only the sources of knowledge but also the process by which that knowledge is articulated, disseminated and legitimated. For Freire, the Catholic Marxist, there is both a personal and systemic character to this reflection: for the development system to become truer to its rhetoric and ideals, he would argue, it bodes professionals to learn to stand back and reflect critically and professionally on what they know and the extent to which that knowledge is transforming, ‘the word and the world’

Conclusion

In this short paper I have argued that that the relationship between knowledge and development requires us to be clear about the fundamental nature of the knowledge we wish to use in our struggle to reduce poverty and sustain our environment.

Knowledge systems and technological solutions can contribute to combating poverty and at the same time take good account of environmental considerations – to do so we must be clear about the nature of this knowledge and the dialectical process of its

relationship to what we want it to do i.e. in this case reduce poverty within a sustainable environmental context.

For me it is the culture concept that provides the best 'bridge' between knowledge and development in that a cultural analysis provides us with the means to examine first the rooted and situated nature of our knowledge and secondly the intellectual tools to examine and critique the uses to which that knowledge will be put.

But it is not knowledge for doing this or knowledge applied for this or that purpose, rather I am arguing that knowledge is embedded in the very practice of poverty reduction and environmental protection. Knowledge, when reified to the level of theory, is in danger, especially in the development world, of reducing the value accorded experiential and situated knowledge. It may well be that the 'gap' between theory and practice is of more importance than the 'gap' between ideas generated in either the North or the South and then applied upon the 'deserving poor'?

This is our knowledge discourse that is an authentic alternative to the global discourses originating in the North. If knowledge is discursive and embedded in practice it must also be critically evaluative of the way our knowledge is 'performing' and truly contributing to our aims of a sustainable world.

We need, in other words, to be a little more modest in what we do: to start by listening to what the South want to talk about, to use this discussion to critically appraise our frames of reference and means of collaboration, and then to proceed in true partnership in solving the many problems which affect us all.

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Biographical profile

David Stephens is Professor of International Education at Oslo University College. Prior to his appointment in 1999 he was a senior member of the Centre for International Education at the University of Sussex in England.

For thirty years he has worked in schools and universities in the North and South as a teacher, lecturer, researcher and development aid administrator. He is currently directing a Norwegian Research Council funded project on 'Schooling and Cultural Values in Africa'

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