The Common Heritage: What Heritage? Common to Whom?

JONATHON PORRITT

30 Swinton Street
London WC1X 9NX, UK.

ABSTRACT: Global commons are natural goods which transcend national boundaries. A brief glance at management of oceans and terrestrial commons is succeeded by fuller discussion of rainforests, over which nations claim property rights, yet which perform global services. Leasing out could effect a desirable transfer of funds from North to South. Sustainable development requires these or other large incentives towards environmental protection in developing countries, but land and institutional reform are crucial to success. In conclusion, the anthropocentric ethic implicit in all such solutions is contrasted with the ecocentric one which may be necessary to preserve the biosphere in the future.

KEYWORDS: Biosphere, global commons, rainforests, property rights, stewardship, sustainability.

What exactly do we mean by those swingeing pieces of eco-rhetoric, 'the global commons' and 'the common heritage'? These are phrases that come pouring out of eco-spokespersons like me with enormous enthusiasm, but quite often, I suspect, we haven't the first clue what we actually mean by them!

I intend to limit my area of concern almost exclusively to our *natural* heritage. That is not to say that our heritage is just a natural one: there is a man-made heritage which is just as valuable – science, culture, the built environment, all of those human capital and human infra-structure aspects which are important in their own right; but I want to concentrate on our *natural* heritage and on 'the global commons'.

It seems appropriate to start with a definition, and since I have not been able to find a really good, hard-hitting definition of the global commons, I have invented one. What I came up with is this: 'sources of natural wealth, or providers of natural or environmental services, primarily (but not exclusively) beyond national frontiers'. Some people would take a much broader definition than that. For instance, people often talk about shared watersheds as part of the global commons, implying that if two or more countries share access to or dependence on a watershed, that takes that particular environmental function

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beyond the reach of one nation's sovereign control, and therefore makes it a global commons concern. I do not think that is technically a very accurate way of using the phrase 'global commons' as the word 'global' should have some real meaning. So I shall look primarily at what is going on as regards the atmosphere, which I think people would agree to be indisputably a global commons, at the oceans beyond the 200 mile exclusive economic zones that come under the sway of national legislatures, and to a lesser but I suspect more controversial extent, at terrestrial global commons.

The best known example of that latter category, which I shall mention only briefly, is Antarctica: probably the only example of a piece of real earth that does not fall under the sway of any national government. Indeed, it is the one part of the earth-bound bit of planet earth that is not owned by anybody, and to which there are no serious sovereignty claims outstanding (although Argentina and Chile might dispute that, as they have been doing for the last forty years). The Antarctic Treaty, established in 1961, has led to a pattern of behaviour and co-existence between all of those countries that share research stations on Antarctica. The long and extremely difficult international campaign to get the Antarctic established as a World Park was not successful, but the second-best option (which was to bring about a 50 year moratorium on any serious mining or other development on the continent of Antarctica) was successful, and to all intents and purposes puts the Antarctic beyond any involvement in the normal processes of industrial development.

I do not intend to dwell long on the oceans either, although in terms of the history of the concept of 'common heritage' it was largely the oceans that gave rise to the early debates in the fifties and sixties. In particular, the "common heritage of mankind" featured very prominently in the discussions about the Law of the Sea throughout the sixties. Prior to that, it was also a popular concept in the various international commissions that were established to try and control access to and management of different ocean-going fisheries (not, it has to be said, with much success). Paradoxically, although the Law of the Sea negotiations were primarily about finding ways of sharing mineral wealth on the sea bed, what they actually produced was something very different, namely, the concept of an exclusive economic zone (EEZ) extending 200 miles out from the sea-shelf of each country with a relevant coastline. The thinking behind this was crystal clear: that where there is no ownership, there is no mechanism to limit the access of participants to any fishery.

That approach to the control of fisheries demonstrates a sharp and particularly important example of Garret Hardin's well known 'tragedy of the commons'. This remains one of the seminal documents about what we mean by the global commons and how we might best approach the business of managing those commons in the interests of the commoners. (I will come back to the commoners later on). Garret Hardin's short but critical essay posited the theory that it is practically impossible for human beings to manage a communally

shared resource without in some way destroying the means by which that resource creates wealth. He quoted as his example the simple, almost medieval idea, that if a certain number of people share grazing on a collectively held area of land, it would only take one person to break their collective agreement not to overgraze the commons, for the whole thing to collapse. It became an extremely influential document in the environment movement of the late sixties and seventies.

I think it is only fair to point out that this is not a universal tragedy, and it is not a universal hypothesis shared by all environmentalists. The New Forest is shortly to become a new National Park, and British newspapers have recently contained wonderful photographs of the Court of Verdurers – an arcane and admittedly little known body going way back into the history of England, but a classic example of how, if there is a continuing and consistent common purpose, it is perfectly possible for people to continue to manage a common resource on a collective basis. And there are many examples of this; indeed, the whole tradition of common land in Britain is one that needs to be held up against the supremacy of the tragedy of the commons. Extending that further, many people have looked at patterns of communal land-holding in different parts of the world, and the ways in which indigenous or tribal people have a totally different sense of what land-holding actually means.

Nevertheless, most of those historical examples – courts of verdurers etc. – have been swept away by European concepts of territoriality and ownership. It was therefore argued that the only solution to the problem of overfishing in coastal zones was to attribute property rights to the nation which happened to have access to that part of the fishery. This has been a mixed blessing, as any marine environmentalist will tell you. Initially it seemed to provide an automatic answer to the problem of overfishing, but in many respects all that happened was that individual governments inherited the problems that no-one had previously been prepared to face up to. In particular, a lot of individual governments inherited depressed fishing industries with very difficult political problems of what to do about them. They decided, by and large, that the easiest thing to do was to buy peace by allowing as many fishing boats to keep on fishing as actually wanted to; and instead of recovering, stocks in those critical fisheries declined, and we saw a pattern of boom and collapse which has become very familiar to people who know the story of the North Sea over the last few years. There are at last some grounds for optimism, as many countries are beginning to talk of actually buying out the fishing boats, which is the only means by which they can hope to effect any serious change.

I want to concentrate, however, not on the oceans but on the atmosphere. There are two main issues here: the first is ozone depletion, and the second is global warming. Ozone depletion is a particularly good example of the way in which a solution has been found to a very difficult problem. The Montreal Protocol effectively means that in time – and it is a very long period of time,

probably about a hundred years – the damage we have been doing to the screen that protects us from some of the ultraviolet radiation from the sun will be repaired, by the simple expedient of phasing out the chlorine based gases that cause that damage. There is nothing we can do about the chemicals we have already put into the atmosphere, which will work their effect on the atmosphere for a long period of time (some of these chemicals last for more than a hundred years), until the natural balance of ozone restores itself. But the Montreal Protocol is rightly held up as an enormously important precedent in terms of managing one part of the global commons of the atmosphere, and it is particularly important because it shows that you do not always need to extend property rights to global commons in order to effect their rescue.

Property rights, or the atmospheric equivalent of exclusive economic zones, would be meaningless as a way of trying to protect the ozone layer. You cannot carve out a slice of the ozone layer and claim some territorial control over it. When a molecule of CFC drifts up into the atmosphere, whether from Bangladesh or Bognor Regis, it is no respecter of anybody's slice, and there is no way of demarcating who has control over any particular spatial part of that global commons. So it was necessary to devise an entirely different approach, and the way in which that was done was to demonstrate the global interest which would arise out of cutting back on the ozone depleting chemicals. Governments became enthusiastic in their support of the environmentalists' cause, recognizing that ozone depletion was a major problem which would add horrendously to the number of people dying or affected by cancer of one kind or another, and were themselves persuaded so much by their own new-found rhetoric that they moved with astonishing rapidity. In the course of three and a half years (which in international terms is like lightning!) they moved to introduce the Montreal Protocol, and to review it two years later in 1990. Now it is up for further review later this year, in November, when undoubtedly the phase-out deadline will be tightened, so we will get a much tougher schedule which industries will have to meet in order to protect the global commons. The timetable will never be as rapid as environmentalists argue it should be, but the mechanism exists progressively to tighten the screw. And that's exactly what politicians have done.

Moving on to the nub of the problem, I doubt there would be so much interest today in the global commons or the natural heritage if global warming did not loom over every other environmental issue with a tremendously disturbing and very oppressive effect. The trouble with global warming is that although it is an equally urgent problem to that of ozone depletion, the impact of the climate change it will bring about is far less certain in scientific terms, and the options therefore for politicians are that much more abstracted from the normal decision making process. The Intergovernmental Panel on Climate Change recently concluded its review meeting in China, when it went over its 1990 findings in enormous detail, and looked at the whole wealth of new research that has come up in the intervening months: a lot of very important and very controversial

research, not the most difficult of which was the finding that sulphate pollution caused by the burning of fossil fuels was actually serving to slow down global warming. The reason for this is that sulphate particles reflect radiation back into the atmosphere, so the more sulphate particles you have in the air, the more heat is reflected back into the atmosphere and the less the global warming effect. We should not feel too reassured – this is not a solution to global warming, because if we were to put enough sulphate into the atmosphere to protect us from the warming effect, we would be almost certain to destroy all our trees, which are the single most important sink of carbon dioxide from a terrestrial point of view. The planet is not gentle in these matters, and there is no possibility that we can cure one form of pollution by accelerating another.

The most important thing about the IPCC's review meeting was simply that they confirmed their original findings, although they have varied them to a small extent. Those initial findings were that we shall see an average temperature change of roughly 0.2°C to 0.25°C per decade. The best bet we have to work on at the moment is 1°C change by the year 2030, and 3°C change by the end of the 21st century.[1] To some people, that doesn't sound very fast, but as far as the planet is concerned, it is incredibly fast. The real problem is not so much the phenomenon itself – because without a certain amount of global warming, or 'greenhouse effect', life on earth could not exist – as the speed with which that enhanced effect is beginning to impact on our life support systems. Now this, I think, has been borne in pretty well on politicians over the last few years, and gradually they have come to accept that we need to move sooner rather than later to do something about it, even before we have definitive scientific evidence as to the consequences of not doing anything.

What they are now beginning to look at, therefore, are the terrestrial and ocean sinks for carbon dioxide. If those terrestrial (i.e. forests and other biomass) and ocean sinks absorbed 100% of the additional carbon dioxide that we are responsible for emitting, then there wouldn't be a problem. But they don't. They can absorb a certain proportion of it, but they cannot absorb it all. The latest figures from the World Resources Institute indicate that we are annually producing roughly 31 billion tonnes of carbon dioxide, and every year the atmosphere has to cope with an additional 13 billion, because the other 18 billion are being absorbed by the oceans, by the forests and by other terrestrial sinks.[2] There is a real mystery here, which is absorbing the attention of a lot of scientists these days: that there is a huge missing amount of carbon dioxide which nobody can find anywhere in the existing system. They are rather worried about this – and I think they should be too – but nonetheless there is still a very substantial amount of carbon dioxide which the natural sink capacity of the earth cannot deal with. Doing something about global warming means doing something about that excess; that is easily said, but it is quite tricky to work out how to do it.

Some of the most interesting proposals that are emerging at the moment are essentially to extend the concept of property rights to the atmosphere, or to those

particular sinks. This approach says, "Right, we know what the capacity of those sinks is to absorb a certain amount of carbon dioxide. We have got pretty good estimates about that. We're a bit worried about the stuff we can't account for, but we have got a fairly good understanding of how it's all happening. And it is theoretically possible, therefore, to divide up that total figure, and to distribute access to it in one way or another to all human beings on earth." Again, very easily said, but then you run into a wonderful political minefield: on what basis do you distribute access to those carbon sinks? This has led to one of the most riveting exchanges between environmentalists in the north and environmentalists in the south that has been seen for a very long time. Vitriolic papers have been exchanged between Indian and Chinese environmentalists on the one hand, and organizations like the World Resources Institute on the other. This exchange has included accusations of eco-colonialism and a conspiracy to keep the Third World in its place by denying the rights of the poor. The reason for this is that some of those northern NGOs find it hard to accept as a matter of basic justice that the only way of allocating access to those sinks is on a *per capita* basis. Here is a brief extract from one of the most influential reports in this debate, produced by Anil Agarwal and several of his Indian colleagues, in which he puts the case for a *per capita* access approach.[3]

> How can we calculate each country's share of responsibility for the accumulation of gases like carbon dioxide and methane in the atmosphere? It is obvious that the concept of sustainable development demands that human beings collectively do not produce more carbon dioxide and methane than the earth's environment can absorb. The question is, how should this global commons, the global carbon dioxide and methane sinks, be shared among the people of the world? Several studies on the global warming problem have argued, and we argue ourselves, that in a world that aspires to such lofty ideals like global justice, equity and sustainability, this vital global commons should be shared equally on a per capita basis. We believe that a system of global tradeable permits should be introduced to control global greenhouse gas emissions. All countries should be given tradeable quotas, in proportion to their population share, and the total quotas should be equal to the world's natural sinks. The quantity of unused permissible quotas for emissions can then be sold by the low level greenhouse gas emitting countries to high level greenhouse gas producers at a certain fixed rate.

He then goes on to say that there will still be excess discharges,

> Any excess discharges which lead to an accumulation in the atmosphere and thus constitute a global threat for climate destabilization should be fined at a higher rate, and given over to a new global climate protection fund. The fund can then be used to assist those countries affected by climate change to develop technologies that will reduce greenhouse gas emissions.

Anil Agarwal is proposing two things: firstly a tradeable quota, in which those

countries that are in excess of their permissible access to these global sinks have to pay those that are under their global sinks a certain sum of money. (He suggests a fixed charge of $15 per 1000 tons of carbon equivalent). He then goes on to say that those countries like America, who cannot come in balance even with that measure, should then be fined a certain amount more, and that money would go into a global climate protection fund. The sums of money that we are talking about here are pretty large, billions and billions of dollars being paid by high greenhouse gas emitters to low greenhouse gas emitters if that figure is taken on a per capita basis.

Now quite clearly, Anil Agarwal and his colleagues are trying to be as provocative as possible with this notion of a fine. But he is *not* trying to be provocative with the idea of a per capita basis for making the initial assessment. Because, if you extend the concept of property rights to these carbon sinks, on what other basis can you possibly judge there to be a fair allocation? Some American environmentalists, seeing reality where it is, have tried to intervene and say that perhaps what we need is a sliding scale: that we might move towards a strict per capita allocation to these sinks, but in the mean time we need a sliding scale that recognizes historical rates of greenhouse gas emission, and the historical abuse that rich nations have been making of those global commons, and the fact that they need a certain amount of time to get that balance right.

We might despair at the distance between where we are now, and where we will eventually need to get in order to find a solution to this problem. I think despair would be premature. Some people (born-again optimists in the Green Movement – there are a few of us!) see the very scale of this challenge as being a huge opportunity, a way in which the developed world, the OECD countries, may be compelled to take into account continuing levels of poverty and suffering in the Third World. There simply cannot be any solution to global warming unless a proper system is sorted out along the lines that I have been describing. At the bottom of *every* debate about the 'common heritage' of human kind there lurks the issue of equity.

I now want to touch on the terrestrial sinks I mentioned earlier, and in particular to look at the whole question of the rainforests. The rainforests are in one respect very difficult to deal with under the heading of common heritage or global commons, because they are all located by definition within the remit or the sovereignty of individual nation states. Yet because of the environmental services or functions which they provide, they also play an extra-sovereignty role in terms of their contribution to the long term future of human societies and life on earth. In two respects: firstly as the most important terrestrial sink of carbon dioxide, and secondly as the potential provider of enormously important genetic resources on which the future of humankind may well depend.

Rainforests are the home to somewhere between 70% and 90% of all species on earth. Rainforest countries argue, with some degree of acidity, that it is totally inappropriate to describe the genetic resources of the rainforest as part of the

'global commons', although OECD countries are very keen to try and establish them as such. A country like Brazil, for instance, will argue that there is no logic in this: their genetic resources may well be of use to all inhabitants of the planet, but they are not global commons. As far as the Brazilians are concerned, genes should be treated as just an ordinary commodity like any other – like bananas or oil. And from that perspective, those genes are the sovereign property of the nation state in which they happen to be found.

I do not think we are likely to get very far down the line of demonstrating that the rainforests are global commons on the basis of their genetic wealth. We may get further on the basis that they are the most important terrestrial sink for carbon dioxide. Over the course of the last two years major countries like Brazil and Malaysia have ceased to deny that there is a global service provided by the rainforests. Initially they felt that even to acknowledge this publicly would in some way impair or erode their grip on national sovereignty. I think they have been encouraged to do so because the evidence has got stronger and stronger about the extent to which this global commons is in itself a life support system for the *whole* of humankind .

"O.K.," says Brazil, "Fine. Let's call it a global commons if that makes you all feel happier. Well, why can't the global commoners pay for its protection? If every single human being is dependent upon the maintenance and the health of these forests, then why shouldn't every single human being in one way or another contribute to their protection?" There is an incontestable logic behind what they say; but it is wholly unwelcome as far as the developed world is concerned. Inevitably, they end up arguuing: "But how are we going to value the contribution of this service to humankind as a whole?" There is no market mechanism for actually attributing value. There is no market place to take your acre of rainforest, and say, "You want to protect it? How much are you going to pay for it?"

Well, there isn't as yet. But interestingly we are beginning to see some very creative thinking about this, taking us a little bit beyond the proposals that Anil Agarwal was putting forward. Some very keen, green – or relatively green – free-market economists have begun to ask why it isn't possible to exercise the discipline of market economics to find solutions to these problems. They have come up with an alternative: that each OECD or rich, industrial northern country assesses its own carbon balance; that assessment is then audited and approved by a new international regulatory body, and that country is then charged with the responsibility of getting its carbon balance right. Each country will then assess the range of options and the cost of each different option to achieve that balance. To the list with which we are already familiar – things like energy efficiency, development of renewables, planting a few trees in your own country (which isn't as effective in northern climates as it is in the tropical zones) – we now add another: leasing areas of rainforest. A new commodity market would be established, in 'rainforest sinkage'; the price would naturally rise to that level at

which such a leasehold brought about a "bigger bang for your buck", to use Mrs. Thatcher's inimitable terminology, than investment in energy efficiency, planting trees, or whatever else it might be. This, by a strictly acceptable market mechanism, would effect a massive transfer of funds from north to south, because it would be unarguably in our interests to protect 'the global commons functions' of the rainforests in that way.

Before passing on to my concluding comments, as a seasoned agent provocateur, I can't help but to throw in the whole question of land reform. It's still a political anomaly that here in Britain, which takes great pride in being a property owning democracy, we seem to have no enthusiasm for bringing leverage to bear on some developing countries in which property owning is the preserve of a tiny minority of the very rich and the very privileged. In his speech at the Commonwealth conference in Harare, John Major mentioned that developed countries were now contemplating new forms of conditionality which would determine the ways in which aid budgets were allocated; and he mentioned human rights and democracy. A lot of environmentalists and development experts are worried about the concept of conditionality. I find that I am not. I think that any monies that are transferred from north to south need to have conditions attached to them, just as they do now, and I hope that those conditions will achieve exactly the opposite of the conditions that are attached now: that they will encourage human rights, increased access to democratic systems, and patterns of land reform and sustainable development. Developing countries of course are claiming that this constitutes an unwarranted trespass on national sovereignty!

It is very important in this debate to recognize that the prevailing systems of land ownership in the world today – which are, indeed, dominant *throughout* the world since their export from Europe – are relatively recent in historical terms, and by no means permanent. There is no reason to assume that we shall always automatically have the same system of private ownership as we do now.

It is of course debatable whether or not land can be referred to as a global commons, inasmuch as it all falls under the sovereign control of different nation-states. But in one respect, if only philosophical, it is important to demonstrate that land, as topsoil, *is* a part of the global commons, because it is part of that natural wealth on which we all depend. No topsoil, no food; or not much, anyway: a few fish, a bit of hydroponically grown tomato, synthesized protein, and so forth. So we should not forget land reform as a critical constituent of any overall strategy to achieve the protection of our global commons.

Finally, I want to touch on the capacity of individual institutions today to deliver solutions to these problems. I fear that the institutions on which we are dependent are almost wholly inadequate for meeting the kind of challenge that I have mapped out. To give one example: one of the most interesting ideas currently under consideration is an extension of the so-called Global Environment Facility. This is a new and important development whereby additional

funding will be made available to developing countries to compensate them for what are known as 'sustainability increments', i.e. additional costs incurred in developing sustainably, rather than developing unsustainably as we have all been doing so enthusiastically up until now. The Global Environment Facility falls under the control of three organizations: the World Bank, the United Nations Development Programme and the United Nations Environment Programme. It is hard, really, to think of a more ineffective gathering of world institutions to ensure that the Global Environment Facility will be properly spent in the pursuit of genuine sustainability, equity, and the protection of the global commons. Institutional reform has been the lost issue of the whole Earth Summit: hardly surprising, since the Earth Summit was basically organized by the United Nations General Assembly, and it is essentially the United Nations that now presides over a total collapse of the original motivation, the original idealistic thrust, which caused it to be set up in the first place. All of those things cause us to question whether or not we have got reasons for hope.

I have attempted to demonstrate that there are solutions available to us which would allow us to protect all the identified global commons. And yet, at the moment, all of the institutions and the precedents that we have will, I think, only take us so far down this road. Eventually they will fall foul of national sovereignty or other hoary old concepts that remain so dominant. In addition, all available international institutions and agreements today reinforce a traditional human centred, or anthropocentric, environmental ethic. The global commons, in everything I have said so far, should be protected primarily for the sake of human interests. I have not adduced any other single reason why we should protect any of the global commons or the life-support systems that I have touched on. I have not dared, in my philosophical inadequacy, to suggest that we might protect those commons for their own intrinsic value, or for the intrinsic value of every other species that is as dependent on them as is humankind. Our existing systems and institutions recognize only instrumental value, i.e. if it is of use to us, then do it; if it is not, forget it.

This part of the problem is pretty neatly encapsulated in Philip Allot's claim: "The common heritage *is* mankind".[4] No, the common heritage is *not* mankind, or even humankind. The common heritage is the biosphere, which does not belong to mankind but to all of life on earth; if 'belong' is even the right word to be using. We humans clearly have a special role. We must reach out to a totally different definition: that the earth's biosphere is the common heritage of all life on earth, of which humankind is, temporarily, the steward. I would like to put in 'temporarily' because some people think we are a permanent feature of life on earth, but of this I'm not so sure. James Lovelock disputes that we should talk about ourselves as stewards: he sees that as an extension of the kind of anthropocentric arrogance that makes us such utterly inept managers of life on earth today. He came out with this wonderful quote:

> Everyone these days is a manager. We even talk of 'managing' the whole planet, with

all of us as stewards of the Earth. I think it's arrogant even to talk in such terms. Originally, a steward was a keeper of the sty where the pigs lived; this was too lowly for most humans, and the status of the 'styward' was gradually raised as he was put in charge of men as well as pigs. Are humans now to be made accountable for the smooth running of the climate, the composition of the oceans, the air, and the soil?

I would suggest that our real role is more like that of the proud trades union functionary, the shop steward. We are not managers or masters of the Earth, we are just workers chosen as representatives for the others, the rest of life on our planet. All living things are members of our union, and they are angry at the diabolical liberties taken with their planet and their lives by people.[5]

I'd go along with a lot of that, even at the rhetorical level. But to what extent, seriously, can the concept of the common heritage of mankind be adapted to accommodate that very different ecocentric ethic? That is a very big challenge that I think probably will only trickle out between the interstices of many of the articles in this journal. I shall conclude with just one statistic: that as of today, humankind has already subsumed 40% of the net primary product of terrestrial photosynthesis on earth today.[6] Forty per cent. That may not sound too serious, but just imagine, with the projected doubling of the world population in 35 years, we could well be talking about 80% of net primary terrestrial photosynthesis product coming within the control and domination of humankind within one generation. The chances of actually controlling, or managing, or protecting, the global commons under that kind of system are absolutely zero.

NOTES

Slightly adapted from the text of a 1992 Global Security Lecture given at the University of Cambridge on 23 January 1992.

[1] IPCC 1992 Summary.
[2] World Resources Institute, 1991.
[3] Agarwal and Narain, 1991.
[4] Allot, 1992.
[5] cited in Porritt, 1991, 19.
[6] Vitousek et al., 1986.

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