
AN ESSAY ON BIODIVERSITY AND GLOBALISATION

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1. Introduction

This essay ends with the following statement: “Failure to address the reality of globalisation on the part of the biodiversity community will open the door to an accelerated decline of the quality and quantity of life on our planet”.

2. The Political Economy of Biodiversity

Biodiversity is now widely accepted as a scientific concept encompassing the diversity of life on Earth. This diversity is generally described at three levels – diversity of ecosystems, diversity of species, and diversity of genes. As a scientific concept, biodiversity is a more precise description of what most people call “nature”.

Biodiversity, however, is more than a scientific concept. It is also a political concept embracing a trinity of globally-agreed objectives:

- conservation of biodiversity,
- sustainable use of biological resources, and
- equitable sharing of the benefits arising from this use.

The political concept of biodiversity is particularly relevant to globalisation as it deals with the interface between the ecological, economic and social processes. Biodiversity is about control over and access to our planet’s biological resources. It is about the economic uses of these resources. It is about social equity with respect to the distribution of associated benefits and costs. And it is about conserving the ecological systems of our planet.

Biodiversity is also an economic concept in that biological resources provide a complex array of goods and services for the benefit of humankind. Some of these are critical to the survival of the human race, such as

management of the climate system and the provision of fresh water. Others respond to core demands for nutrition, shelter and clothing. Still others respond to demands for scientific inquiry, natural beauty or outdoor recreation.

Some of the goods and services provided by biodiversity are public in that society at large benefits from their provision. Watershed services and carbon sequestration are two examples. Others are more private such as food products and nature-based tourism. This implies that there are roles for both public institutions and private institutions in the management of biodiversity. However, as discussed in more detail below, biodiversity has generally been managed by public institutions. As globalisation changes the role of these institutions, it is directly impacting the way in which these institutions can or should manage biodiversity.

3. The Meaning of Globalisation

Rudd Lubbers, the former Prime Minister of the Netherlands, is one of the world's best known experts on globalisation. He has run a well-known seminar on the subject at Harvard University's John F Kennedy School of Government. The course description offers a good introduction to the concept of globalisation. It is quoted here from the web site at some length (*italics added*):

“The emergence of a global economy compels national governments to reappraise their assumptions of economic governance and, in doing so, to adopt a more systematic approach to the implementation of socio-economic policies. At the same time, *the new global economy also demands a reconsideration of the role of international institutions* (the GATT, WTO , IMF, OECD, NATO, WEU , UN) as fashioners and sustainers of the ground rules for numerous international transactions in the domains of security, human rights and sustainable development.

“We define globalisation as a process that widens the extent and form of cross-border transactions among peoples, assets, goods and services and that deepens the economic interdependence between and among globalising entities, which may be private or public institutions or governments. This process is driven by economical (adoption of the system of free-market economy and economic liberalisation, both within and between countries) technological (advances in information and communications technology) and political (the demise of communism and a movement towards democracy in former communist countries...) developments.

“Globalisation differs from other forms of intensified interdependence between national economies: true economic globalisation involves a qualitative shift toward a system based on a consolidated global market place for production, distribution and consumption rather than on autonomous national economies. Equally important, globalisation involves more than economics or economic interconnectedness. It increases risks and opportunities for individuals and communities seeking to transform local traditions and modes of behaviour in reaction to processes of globalisation that emphasise mobility, simultaneity, pluralism and alternate routes to the satisfaction of needs and services.

“Finally, *globalisation may create a need for supranational global governance regimes to maximise welfare globally*. Such institutions and regimes may be needed to address cross-border market failures that national governments are unable to surmount or fully compensate for. The fields of satellite communications, seabed exploration, nuclear proliferation and protection of the ozone layer, for example, may demand the attention of global institutions to reduce the coordination and transaction costs of such activities or to capture the external benefits of intergovernmental networking. *These international public and social goods will increasingly require pluralist governance structures* if they are to produce truly global public value”.

As highlighted in italics, Lubbers clearly sees a need for new or restructured global institutions to manage globalisation and its impacts. With respect to biodiversity management, this essay supports Lubbers’ call for new institutional structures.

4. Biodiversity and the Global Economy

Globalisation is fundamentally an economic phenomenon. Yes, as indicated above, there are technological aspects of globalisation, such as the rapidly developing global information and transportation networks, as well as energy aspects, such as readily affordable and abundant petroleum supplies. These aspects lower the costs of globalisation by lowering the costs of supplying goods and services on a global scale. The forces behind such supply-side aspects are fundamentally economic and have been made possible by a particular economic development path – the market economy. The essence of globalisation is the ascendancy of the global market economy.

Though the market economy has had and always will have its shortcomings, socialist alternatives are no longer credible options. Even communist China is no longer communist in an economic sense. Virtually all political parties, from the new Labour Party of the UK to the African National Congress of South Africa fully accept that the market as the basis of their economies. Additionally, the market economy is now widely recognised and accepted as a global reality.

Modern economic policy debates now centre not on socialism versus capitalist but rather on role of markets to address government failures and the role of governments to address market failures. In this context, however, support for *politically-administered* or *mercantilist* economic policies remains strong. This is particularly the case in developing countries and in government divisions responsible for the management of biodiversity. But globalisation is now undermining these traditional mercantilist approaches to managing biodiversity.

To explain further, *mercantilism* was the economic system of the European colonial powers. The Portuguese, Spanish, British and French exported this system of politically-managed economies to their colonies in the Americas, Africa, and Asia. Up to today, strong mercantilist elements remain in many of the national structures of these former colonies. The Peruvian economist, Hernando de Soto, defined mercantilism as follows:

“Mercantilism was a politically administered economy in which economic agents were subject to specific, detailed regulation. The mercantilist state did not let consumers decide what should be produced; it reserved to itself the right to single out and promote whichever economic activities it considered desirable and to prohibit those which it considered inappropriate. ...To achieve its objectives, the mercantilist state granted privileges to favoured producers and consumers by means of regulations, subsidies, taxes and licenses”.

While globalisation has emerged from the ascendancy of the market economy, mercantilist approaches remain in terms of internationally-agreed rules for international trade. They also remain strong at the national level as evidenced by the attempts of governments to maintain controls over their economies through central banks, national transport systems, national communication systems, national energy systems, and even national systems of protected areas.

Biodiversity conservation and the management of biodiversity-based sectors, such agriculture, forestry and fisheries, have traditionally been the responsibility of government agencies. Government conservation agencies

almost universally prefer to rely on administrative procedures and regulatory instruments to manage biodiversity rather than market processes and economic incentives. They remain true to the mercantilist tradition and are thus increasingly out of sync with the process of globalisation.

The preference for politically-administered management systems for biodiversity is probably rooted in the development of the modern nation state. In earlier days, monarchs and emperors strove to monopolise access to natural resources. With the emergence of the nation state, national governments maintained the tradition of state monopolies over natural resources. Even a bastion of capitalism like the United States maintains widespread state monopolies over forests, mountains, river systems, lakes, coastal zones, and wildlife.

Thus today in the face of globalisation and the *marketisation* of most sectors of the economy, the management of biodiversity continues to be dominated by out-fashioned mercantilist systems. Yet with the ascendancy of the global market economy, there is also now increasing pressure on governments, especially in developing countries, to *privatise* nature by turning over the management of biodiversity to market forces. At the global level, this pressure is evidenced in the potential conflicts between the rules of international trade and the objectives of the global biodiversity agreements. At the national level, this pressure is reflected both in the belief that protected areas must “pay for themselves” and in the trends towards commercialisation of access to and management of biological resources.

The biodiversity community with its long history of reliance on and use of the mercantilist structures is currently ill-equipped to deal with the pressures of globalisation and increasing demands to commercialise or privatise biodiversity. This situation is especially serious because many proposed market-based approaches to managing biodiversity have not been tested and indeed may not work. Thus, there is a critical need to strengthen the commercial acumen of the biodiversity managers and at the same time there is a critical need to develop precautionary approaches to the marketisation of nature. As suggested by Lubbers, there is a need for new or strengthened global institutions to deal with these challenges.

5. Global Biodiversity Agreements

The global biodiversity agreements provide the political framework for strengthening existing approaches and developing new approaches to managing biodiversity, especially in the context of globalisation. With the reach of the global economy, it is more and more necessary to develop global agreements on the interactions between economic activities and our

planet's ecological systems. Without such global agreements, the processes of globalisation will remain ungoverned and their potentially negative impacts on the biodiversity unchecked. This section briefly introduces a few of the key global biodiversity agreements and then proposes that the linkages between them need to be strengthened.

5.1 The Convention on International Trade in Endangered Species

One of the oldest biodiversity agreements (early 1970s) interestingly enough focuses on a key feature of globalisation – international trade. CITES or the Convention on International Trade in Endangered Species of Wild Flora and Fauna regulates trade in endangered or threatened wildlife. Through a listing system, it bans trade in critically endangered species and limits trade in threatened species to exports which are shown to be non-detrimental to the species.

Given the mercantilist nature of biodiversity management, it is perhaps not surprising that there has been a much stronger emphasis on using CITES to stop trade or to limit trade rather than to develop trade measures and practices which promote sustainable use. The many anti-trade decisions under CITES are, of course, in apparent conflict with international free trade policies. In this context, the critical role of CITES needs to be reconsidered.

5.2 The World Heritage Convention

Another early biodiversity agreement, the World Heritage Convention, focused on identifying key natural (and cultural) sites which should be protected. In so doing, it recognises that there are specific sites of global significance which should be formally recognised as such. Thus this agreement supports the understanding of biodiversity as a global resource generating global intangible benefits.

5.3 The Ramsar Convention on Wetlands

A third early agreement focuses on the conservation and wise use of wetlands. The Ramsar Convention on Wetlands (named after the Iranian town in which it was launched) focuses on a component of biodiversity which does easily fit into traditional government structures. While most governments will have ministries or divisions to manage forests, coastal zones and protected areas, few have had explicit divisions to manage wetlands. Furthermore, the legal status of a wetland is often a mixture of public and private ownership and many important wetlands stretch over national boundaries. Thus an agreement to recognise wetlands of

international significance as well as to develop common principles and practices for their management was an early recognition of global responsibilities for biodiversity.

5.4 The Framework Convention on Climate Change

In the early 1990s, the world's governments met in Rio to agree on a joint programme of action in support of sustainable development. Known as Agenda 21, this agreement included the creation of three new conventions to address the topics of climate change, biodiversity and desertification. It also created an intergovernmental process to address forests. One of these agreements, The Framework Convention on Climate Change, boldly addresses one of our planet's major public goods – the climate system.

Under this agreement, governments are also attempting to develop economic instruments compatible with the globalised market economy to manage the climate system. These instruments include a central role for biological resources in the sequestration of carbon. Development of new global markets for carbon sequestration, however, poses a serious challenge to the institutions managing biodiversity. As discussed above, these institutions are universally ill-equipped to operate within such market processes.

5.5 The Convention on Biological Diversity

The major and most visionary biodiversity agreement is the Convention on Biological Diversity. Now ratified by almost all the countries in the world – with the notable exception of the United States, this Convention is attempting to develop a global framework for the management of biodiversity. It is striving to meet the trinity of biodiversity objectives – conservation, sustainable use and equitable benefit sharing – through globally-agreed policies and procedures for managing biodiversity. These policies and procedures are also intended to support the overall goal of sustainable development and the corollary objective of poverty alleviation. But given the tradition of biodiversity management, the Convention has understandably yet to address the pressures of globalisation head-on. There is, however, an increasing recognition that the private sector must be an active player in managing biodiversity, but this recognition has yet to be articulated into clear roles and responsibilities for the private sector and global market processes.

5.6 Merging the Biodiversity Agreements?

The Convention on Biological Diversity or the CBD provides the best global framework agreement for managing the ecological systems and biological resources of our planet. In this sense, all other agreements, including those mentioned above and others such as the Convention on Migratory Species, ought to be merged under the CBD to form a coherent and effective body of biodiversity laws and policies.

Today, however, the various global biodiversity agreements operate virtually independent from each other. Their secretariats scattered around the globe; their meetings taking place at different times and in different places; and their decisions are not harmonised. Though there is now some collaboration between the agreements, most successfully between the CBD and Ramsar, this collaboration is far from adequate. In the face of globalisation, this balkanisation of global biodiversity policy seriously threatens our ability to manage biodiversity.

As a matter of urgency, serious consideration should be given to bring the global biodiversity agreements together.

6. Biodiversity Agreements and Trade Agreements

Unlike the global biodiversity agreements, the global trade agreements are harmonised under the management of the World Trade Organisation (WTO). This new institution is dedicated to expanding and strengthening international free trade. In this sense, it stands at the frontlines of globalisation.

Global trade agreements are evolving in a highly coherent and effective way while the global biodiversity agreements flounder in a myriad of disconnected meetings and resolutions. This state of affairs not only makes the management of biodiversity less effective in its own right, but also in the context of addressing the globalisation of trade.

International trade has significant direct and indirect impacts on biodiversity. As noted above, the direct impacts were recognised some time ago by the biodiversity community with the creation of CITES. The CBD is also concerned with international access to genetic resources and the transfer of bio-technology. And increasingly there is a realisation that the promotion of free trade in developing countries which lack good governments and effective civil society structures is likely to encourage the over-exploitation of biological resources. Thus well-organised trade policies in the face of balkanised biodiversity policies are likely to expand the global economy in ways which seriously undermine biodiversity.

If the biodiversity agreements are to become an effective counterweight to the trade agreements, they must “get their act together” and become more focused with respect to biodiversity measures for managing international trade.

7. Global Biodiversity Organisations

In addition to bringing the global biodiversity agreements together, we need to look at opportunities to strengthen the position global biodiversity organisations. This section covers some of the key institutions and then considers whether mergers among them might be appropriate.

7.1 IUCN-The World Conservation Union

The world’s major biodiversity union is IUCN. Founded in the 1940s, its 900 plus members includes States, government agencies and NGOs. IUCN also has large commissions of experts on species, protected areas, ecosystems and environmental law. And the IUCN secretariat is an institution in its own right with a global programme and offices in 40 countries.

The mission of IUCN is to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. That this mission is fully compatible with the trinity of biodiversity objectives is not surprising as IUCN was instrumental in the creation of most of the global biodiversity agreements. In the early days, CITES was an IUCN agreement and today Ramsar is hosted by IUCN. Also IUCN has key responsibilities for the implementation of CITES, Ramsar and the World Heritage Convention and is increasingly being asked to play key roles with respect to the CBD.

Ironically, however, just as globalisation was becoming a real force, IUCN decided to decentralise and to regionalise focusing locally more than globally. Also as a union of governments and non-government organisations, IUCN has yet to build a strategic partnership with the private sector. Nevertheless IUCN remains the major global multi-stakeholder biodiversity institution and could be positioned to address the impacts of globalisation on biodiversity.

7.2 World Wide Fund for Nature

The World Wide Fund For Nature or WWF is the world's largest independent conservation organisation, with around 5 million supporters and a global network of 27 national organisations, 5 associates, and 21

programme offices. WWF was established in the 1960s as a funding mechanism in support of the work of IUCN. Until the mid-1990s, the two institutions were headquartered in the same building in Gland, Switzerland. They are now in separate buildings about 500 metres apart.

The missions and programmes of IUCN and WWF are essentially the same. Like IUCN, WWF is a global institution with a strong focus on the ground and with undeveloped links to the private sector. Unlike IUCN, however, WWF's members are individuals and not organisations.

In addition to WWF, there are other international biodiversity NGOs such as the Flora and Fauna International, Birdlife International and The Nature Conservancy. None of these, however, have the global reach of IUCN and WWF. Also, all of these are members of IUCN and so in sense form part of its global biodiversity union.

7.3 United Nations Environment Programme

Founded in the 1970s, the UN Environment Programme or UNEP was the first significant intergovernmental agency to address the environmental agenda. In comparison, IUCN is a non-intergovernmental organisation with its mixture government and non-government members. When UNEP was set up, IUCN was already 25 years old and in its early years the green side of the intergovernmental environmental agenda was in many respects simply contracted out from UNEP to IUCN. Today, however, UNEP plays a key role with respect to biodiversity including hosting many of the biodiversity conventions including the CBD and CITES.

With respect to globalisation, UNEP faces many of the same problems as the other UN agencies. Being essentially a club of governments, it is not able to easily accommodate either the NGO community or the private sector. Hence, UNEP is not well positioned to bringing together the various stakeholders to address the impacts of globalisation on biodiversity.

UNEP's role of hosting the biodiversity conventions, however, does offer an important opportunity to bring these together as discussed above. An obvious first step would be to bring all the convention secretariats together under one roof.

7.4 The World Bank Group

Most people would not think of the World Bank Group as a global biodiversity organisation, but increasingly the Bank sees itself as one. During the 1990s, the Bank greatly increased its environmental programme and now has one of the largest environmental staffs and budgets of any organisation. In its proposal for a comprehensive development framework, the Bank integrates the environment as a core component. It is also taking a very active interest in funding projects related to climate change and biodiversity.

With its focus on economic development and its private sector capacity, particularly in the International Finance Corporation, the Bank is technically well placed to address the pressures of globalisation. Its now strong environmental capacity also makes it well placed to address the impacts of globalisation on biodiversity. However, its constituency like UNEP and unlike IUCN and WWF is government-based and thus far too narrow.

7.5 Global Environment Facility

In the early 1990s, the world's governments also established a new funding mechanism for the environment. Known as the Global Environment Facility or the GEF, its mission is to provide incremental funding for global environmental benefits. This mission fits well with the process of globalisation as it focuses on global impacts rather than national or local impacts. A large part of GEF funding is either directly or indirectly supporting projects on biodiversity.

Though the GEF is a global financial mechanism for biodiversity, it is not really structured as an independent institution. It operates through windows in UNEP, the World Bank and the UN Development Programme. Thus it is not well positioned to act on its own with respect to globalisation. In close association with other institutions, however, it could play a key role.

7.6 Towards the World Biodiversity Organisation?

Just as global biodiversity policy is balkanised under the various biodiversity conventions, global programmes of work on biodiversity are also balkanised under a host of global biodiversity organisations. This presents a particular problem with respect to the interface between international trade and biodiversity. Today we have no clear biodiversity counterpart to the World Trade Organisation.

It is also a problem with respect to the multinational corporations. One of the key features of globalisation is the globalisation of corporations. We are witnessing an ongoing series of mergers and acquisitions creating huge

global corporations in all sectors of the economy including, banking, petroleum, autos, airlines, telecommunications, information technology and even fresh water. Without a strong “World Biodiversity Organisation,” there will be no credible biodiversity counterpart to these global corporations.

The timing may be right for strategic mergers and acquisitions within the biodiversity sector. Already the World Bank has collaborative agreements with IUCN and WWF. IUCN also has an agreement with UNEP. The intergovernmental agencies, however, are likely be able to find a meaningful place for the civil sector and the private sector into their structures. Hence global “non-intergovernmental” and non-governmental organisations may provide the best opportunity.

At the moment, it appears as if a strategic merger between IUCN and WWF would be our best chance to create a World Biodiversity Organisation which is strong enough to seriously take on the challenges of globalisation including providing a counterbalance to the WTO and a counterpart to the global corporations.

8. Biodiversity and the Global Corporations

As already alluded to, a major biodiversity challenge of globalisation is the emergence of huge global corporations. These companies have the ability to exploit biological resources and to impact the status of biodiversity throughout our planet. In an increasingly globalised world, their global economic power means that de facto they play a major role in managing our planet.

If we want to manage global biodiversity effectively, we must engage the global corporations. Global biodiversity policy cannot be developed by and for a club of national governments. Policies must be developed by and for global corporations as well. For example, just as we expect national governments to develop biodiversity strategies and action plans, we should also expect global corporations to develop their own biodiversity strategies and actions plans. This is especially true for the biodiversity-impacting industries such as mining and transport as well as for the biodiversity-based industries such as agriculture and tourism. And, once again, there is a need for a credible World Biodiversity Organisation to engage substantively with these global corporations.

Interestingly engaging the global corporations in the biodiversity agenda may actually have more far reaching results than our current focus on improving the performance of national governments. It is precisely these corporations which operate across the face of our planet. Getting them to act

positively with respect to managing biodiversity will produce globally significant results on a global scale.

9. Biodiversity and Global Information

As Lubbers explains, globalisation has many dimensions in addition to the economic ones. A key dimension is information. If we are to conserve biodiversity and to ensure that the uses of biological resources are sustainable and equitable, we need to gather and synthesise much more information than we have currently about biodiversity management. We not only need more complete and detailed biological information, we also need a better understanding of the roles of economic instruments, legal structures, social practices, and cultural traditions in managing biodiversity. The global information and communications revolution allows us for the first time to begin to understand how our planet functions on a global scale and which human actions support or undermine the integrity and diversity of our planet's ecological systems and biological resources.

10. Concluding Remarks

In May 1998 at the WTO/GATT 50th anniversary celebrations US President Bill Clinton remarked: "Globalisation is not a policy choice – it is a fact". Globalisation is a fact that the biodiversity community cannot ignore. If properly harnessed, aspects of globalisation can help us to better manage biodiversity. If not properly managed, aspects of globalisation will seriously threaten the diversity and indeed the integrity of our living planet.

Global biodiversity policy must come together into a coherent and influential body of laws and practices. It must be able to address key components of globalisation such as international trade and global corporations.

Global biodiversity organisations must take a serious look at their internal operations and external partnerships. Strategic mergers and alliances should be considered to ensure that biodiversity conservation is promoted and managed on a global scale alongside the many global processes promoting and managing international trade, finance and commerce.

Failure to address the reality of globalisation on the part of the biodiversity community will open the door to an accelerated decline of the quality and quantity of life on our planet.