Rosa-Luxemburg-Foundation Manuskripte 75

on and similar papers at core.ac.uk

Rosa-Luxemburg-Foundation, Reihe: Manuskripte, 75 ISBN 978-3-320-02144-3 Karl Dietz Verlag Berlin GmbH 2008 Satz: Marion Schütrumpf Druck und Verarbeitung: Mediaservice GmbH Bärendruck und Werbung Printed in Germany Rosa-Luxemburg-Foundation

ULRICH BRAND Between Protection, Rights and Commercialisation

The Convention on Biological Diversity in the Process of Globalisation and the Opportunities for a Democratic Politics of Biodiversity

Karl Dietz Verlag Berlin

Foreword

The accelerated disappearance of species worldwide and the rise in the technological possibilities for the economic valorisation of plants and animals, particularly through gene and information technology, has led to resistance against these developments in the last two decades. A variety of different actors are engaged in this field, including non-state environmental organisations, organisations critical of globalisation, national, including statelevel actors, and organisations operating internationally. Following the end of the Cold War the international diplomatic sphere has opened up to problems connected to the conservation of biodiversity. In this context the Convention on Biological Diversity (CBD) emerged.

From the 19th to 30th May 2008 the Ninth Member State Conference of the CBD will take place in Germany. Many actors from the education, environmental and development sectors, as well as academia, are most likely to accompany this event, making information on the many-facetted issues of this topic available in the public domain. The Rosa Luxemburg Foundation aims to influence the debates through its educational work. The political handling of the problems of biodiversity has and continues to be an important element of the Foundation's commitments to political education and its work in other countries. In shaping opinions, many factors and connections have to be both recognised and considered, especially with respect to global processes.

Problems with gene technology are discussed time and again. The issues revolve around patent protection and other legal questions, as well as whether economic advantages should override people's quality of life. There is still too little discussion on the fundamental questions regarding the politics of technological developments and democratic decision-making regarding what technologies should be developed and how they should be used. The strategic aims of leading scientific-technological research institutes and corporations determine the political dynamics of research, for example in the area of gene or nanotechnology where it is not yet possible to foresee the effects on biotechnology. Decisions are not discussed publicly and it is merely the consequences of technology developments and how to deal with them that can currently be negotiated in the public domain.

For this reason this contribution by Dr. Ulrich Brand is particularly important for our educational work, as he analyses the process of the CBD to date and considers options for more democratic biodiversity policy-making. He provides insights into the international negotiation processes, showing how the rules are made and what their goals are, and discusses whether and how these goals can be realised. If at all, democratic biodiversity policies play a very marginal role, as does the actual conservation of biological diversity. Ulrich Brand also draws attention to the considerable imbalances of power, for example in the role of the WTO.

This text provides background information on the complexities of this issue in order to enable a political engagement with the problems of biodiversity. The author stresses the options for democratic biodiversity policy-making, for example through transparency in the development of science and technology, through the disclosure of biopiracy practices and its responsible actors and through the identification of weaker actors and their interests.

Dr. Evelin Wittich, Director Rosa-Luxemburg-Foundation Berlin/Germany

ULRICH BRAND Between Protection, Rights and Commercialisation

The Convention on Biological Diversity in the Process of Globalisation and the Opportunities for a Democratic Politics of Biodiversity¹

Abstract:

The dynamics of the Convention on Biological Diversity (CBD) process are determined less by policies geared towards the effective conservation of biodiversity than the interests in its commercialisation. This must be addressed in the development of a democratic politics of biodiversity. This policy paper places the CBD in the context of globalisation (Part 2), after which it discusses the central functions that have emerged over the last fourteen years since its ratification (Part 3). The CBD process continues to be shaped by conflicts, uncertainties and open questions. This was apparent at the last member state conference in Curitiba, Brazil. Central lines of conflict include questions of access, benefit sharing and intellectual property rights, problematic conservation strategies and the introduction of genetically modified seed, the disputed position of indigenous peoples and farming communities in negotiations, and the slow implementation process. Further to these, this paper considers the relationship of the CBD process to the World Trade Organisation (WTO) and the structural imbalances of power that exist (Part 4). The CBD obscures important questions, especially those of technological development, the increasing militarisation of the appropriation of nature and biopiracy, as well as the unequal role and options for action available to men and women (Part 5). In light of its current relevance, this paper considers the Millennium Ecosystem Assessment and highlights the opportunities and risks it presents (Part 6). In conclusion, the main orientations of a democratic politics of biodiversity (Part 7) and the role of civil society actors (Part 8) are addressed, with a view to the Ninth Member State Conference which will take place in Germany in May 2008. This paper does not make recommendations for concrete demands, as such demands will not only emerge from the analysis here, but have also been elaborated already by the individual actors involved. This paper attempts to place the many conflictual questions in their context and elaborate some of their causes, in order to facilitate discussion and negotiation.

¹ Prof. Dr. Ulrich Brand joined the University of Vienna as Professor of International Politics in September 2007 and is a member of the research group on International Biodiversity Policy.

Table of Contents

1. Introduction

- 2. The historical context: Globalisation and biodiversity
- 3. The complex role of the CBD

4. Current problems and conflicts in the CBD process

a) Access, benefit sharing and intellectual property rights: Prospects for an international ABS regime

- b) Conservation of biodiversity and the introduction of genetically modified seed
- c) Instrumentalisation of indigenous peoples and farming communities
- d) Implementation weaknesses
- e) Lack of coherence within the CBD, and in comparison with other conventions
- f) Forum-shifting
- g) Maintenance of structural power imbalances

5. Omissions within the CBD Process

- a) Regulatory difficulties of technological developments
- b) Biopiracy and the increasing militarisation of the appropriation of nature
- c) Obscuration of asymmetrical gender relations
- 6. Significance of the Millennium Ecosystem Assessment
- 7. Opportunities for a democratic biodiversity policy process
- a) Democratisation of science and technology development
- b) Disclosing the practices of biopiracy and the actors involved
- c) Making the concerns of weaker actors visible

d) Demanding not only the participation of weaker actors, but also their legal claims to rights

8. The role of civil society organisations

9. On the way to COP 9 in Germany, 2008

Bibliography

1. Introduction

This policy paper examines the following question: To what extent is the CBD able to promote a democratic politics of biodiversity on an international level, and in the different national and local contexts? To answer this question, this paper draws on the experiences of the fourteen years of the Convention's existence. This is undertaken with a view to the upcoming member state conference of the CBD that will take place from the 19th to the 30th of May 2008 in Germany. Prior to this, the Fourth Member State Conference of the CBD Protocol on Biological Security (Cartagena Protocol) is scheduled, also in Bonn.

Democratic biodiversity policies include all of the ideas and practices that on the one hand contribute to the conservation and sustainable use of biological diversity, and on the other, provide the opportunity for all affected populations and actors to shape their lives as they see fit (and deal with the relationship between society and nature). A democratic approach necessitates a reduced influence of those non-state actors who are currently dominant, particularly the agricultural and pharmaceutical industries.

Democracy is understood here as a process that exceeds formal decision making procedures. It is based on the opportunity for affected populations to comprehend the extent of specific problems, and their ability to assert their interests and values in the political process.

This policy paper highlights a number of problems as well as prospects for a democratic politics of biodiversity. The argument is structured as follows: First of all a short outline of the relationship between biological diversity and globalisation is provided (2), followed by a discussion of the complex role of the CBD in this process (3). In the main part of this paper, the central problems with and omissions within the CBD process are addressed (4 and 5) and an assessment of the recent Millennium Ecosystem Assessment is undertaken (6). After an evaluation of the means by which the conditions for a democratic politics of biodiversity could be improved, this paper considers the process towards the Ninth Member State Conference that will take place in Germany in 2008 (8).

The intention of this paper is to initiate an engagement with the complex issues at stake. Debate – and the resultant clarification of different perspectives, as well as their underlying assumptions and interests – is itself part of a democratic biodiversity policy process.

2. The historical context: Globalisation and biological diversity

Since the 1970s, the erosion of agrarian and 'wild' biological diversity has been considered an important environmental issue. The CBD, negotiations for which began in 1989, is the most important international political institution, alongside the United Nations Food and Agricultural Organisation (FAO), for combating the dramatic erosion of biological diversity.

The context in which the CBD developed coincided with the end of the Cold War and indicated an increased attention to questions not directly connected to security and the East-West conflict. Political and diplomatic space was opened up to address new questions. Concurrently, economic, technological and political transformations had been taking place since the 1970s, summed up by the term, 'globalisation'.

Globalisation is associated with the development of new technologies, especially microelectronics. Developments also include new biotechnologies, for which biological diversity, and in particular their hereditary characteristics, represent a kind of 'raw material'. Research institutes and corporations require 'genetic material' from *ex-situ* or *in-situ* stocks. Here the term 'genetic resources' is problematic because it reflects a specific understanding of hereditary characteristics, based on their economic valorisation.

Bioprospecting refers to research into the 'green gold' of plants, animals and micro-organisms to establish their economic value. The development of gene technologies is accompanied by promises of their potential for fighting poverty, hunger and disease. Characteristic of this process is a high level of uncertainly as to whether, and how, particular properties and DNA sequences can be used, and in many instances outcomes cannot be determined until a much later stage in the process. For this reason, the recourse to 'traditional' knowledge in the handling of plants, animals and micro-organisms can provide important indications. Through the recourse to such knowledge, corporations are able to avoid high research costs. New biotechnologies are expected to generate entirely new markets and branches of production, along with immense profits. Therefore, industries that depend on what have been termed *life sciences*, based in the agricultural and pharmaceutical sectors, are generating impulses for a reconfiguration of the relationship between society and nature. In this respect, corporations are involved in rigorous competition for marketable products and profits. The result is an increased concentration of corporate power.

Biological diversity has also been termed the 'oil of the 21st century'. In other words, it could be the most important lubricant for the engines of a new economic growth, especially in the areas of agriculture, pharmaceuticals, cosmetics and beyond. This has an impact on the research strategies and production patterns of corporations, the life styles of people in areas with a high biodiversity, as well as the lives and consumption habits of many others.

The driving force behind economic and technological, as well as political and legal developments stems from the USA. US companies, such as Monsanto, and US research institutes dominate developments in biotechnology in the agricultural and health sectors. Since the 1980s, the US Government, the Supreme Court, and the US Patent Office have been facilitating research in and safe-guarding of biotechnology. Although the USA has not ratified the CBD, it attempts to shape the CBD process – together with other governments – in the interest of the biotechnology industry (for recent figures, see Brand 2007).

Since the 1980s, at different levels there have been efforts to secure prospects for economic and technological development through political and legal means. The CBD is one element of this trend. Within the social sciences, 'global constitutionalism' (Gill 2003) is the term used to describe the legal process of securing economic and technological development within the property and legal logics of the modern capitalist order.

Furthermore, knowledge, science and technology have also become increasingly important aspects in the political design of globalisation. Politically, this expresses itself in the constitution and significance of the CBD Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA), or the Millennium Ecosystem Assessment. At the same time, publicly funded scientific research is undergoing an increasing commercialisation, i.e. it is being oriented towards its marketability. The conditions under which political processes take place are complex and uncertain. This is not only the case in relation to the unclear economic results of developments in gene technology already mentioned, but also with respect to the impact of international regulation on the national and local levels. Delegates to international conferences make binding decisions without knowing their consequences. This is particularly the case with representatives from Southern countries who are often placed under enormous pressure. Yet it remains unclear to what extent organisms that have been modified by gene technology have a negative effect on the health of people and animals, or to what extent other environmental problems such as climate change undermine policies against the erosion of biological diversity within the CBD framework.

In the context of globalisation, the driving force behind international biodiversity policy is not so much the conservation of biological diversity, or the reversal of its erosion, but rather the various interests invested in the commercialisation of biological diversity (see Görg 2003; Kaiser 2003; Wullweber 2004; Brand/Görg 2008; for theoretical and critical perspectives on sustainable development cf. Meier/Wittich 2007; Conca et al. 2008). The process of commercialisation is accompanied by conflicts that are integral to the CBD framework (and that of the FAO). This does not mean that the protection or conservation of biological diversity is not important. Many actors assume that attributing economic value to biological diversity will best serve the purpose of protecting and conserving it. To overstate the point: Such a perspective implies that the effective protection of the natural environment has to be economically profitable.

3. The complex role of the CBD

Member states have three main goals with respect to the CBD (Art. 1 of the CBD): conservation of biological diversity, sustainable use of individual components and fair distribution of the benefits that result from their use (*benefit sharing*). The approach also involves taking into consideration access to genetic resources and technology transfer, as well as measures to protect intellectual property rights (IPRs). In comparison to other international conventions, high value is attributed to the role of indigenous and local communities within the CBD (the term 'indigenous peoples' is avoided in the official documentation in order not to strengthen possible claims to self-determination).

Significantly, this is the first time in international law that 'national sovereignty' is placed above natural (not just genetic) resources (e.g. Article 15.1 of the CBD). This displaces the previous notion of a 'common heritage of humanity' in the appropriation of biological diversity, meaning that local populations no longer automatically have rights.

The CBD has become the central international political terrain for '*wild*' biodiversity. The area of agro-biodiversity, i.e. cultivated biodiversity, is primarily covered by the FAO in the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR) which was ratified in November 2001, although the CBD still plays an important role here too.

The initial focus of the CBD was environmental protection. However, in the negotiation process prior to 1992 and the subsequent development of the CBD, other actors and their interests gained increasing influence. On the one side, these included corporations and research institutes of the agriculture and pharmaceutical sectors, and on the other, indigenous peoples and rural communities. In many instances, the latter have been represented by NGOs. Since the Conference of the Parties (COP 3) (in Buenos Aires in November 1996) at the latest, they have had a more immediate presence.

The most important political functions of the CBD can be described in the following way:

The CBD represents a political-legal framework, not only to improve the conservation of biological diversity, but also – and in particular – to protect the kinds of scientific and economic-technological developments mentioned above. Despite the immense complexity, it is possible to determine today that the CBD is part of a 'global constitutionalism'; in other words, the internationalisation of the western-bourgeois legal and property order. The economic appropriation of biological diversity, and in particular of genetic goods requires extensive legal protections. These function primarily in the interest of 'modern' actors. Namely, the pharmaceutical and agricultural corporations and research institutes.

The CBD is a framework convention, not an organisation with resources or powers to sanction (such as the WTO, or in terms of resources, the FAO). It comes into effect through the translation of agreements into international law and national policy.

The CBD does not only constitute a political-institutional terrain that provides a framework for national implementation. It also provides an orientation for particular actors. Besides communication between participants, education and public awareness played a significant role in the negotiations of COP 8.

As an international policy treaty, the CBD provides a space for the elaboration of more or less shared perspectives, with respect to (a) what exactly the problems and their causes are; (b) how they should be dealt with; and (c) where experience with concrete policies have been gleaned. Dimensions (a) and (b) can by no means be taken for granted, given that varying interpretations of problems and solutions that exist in different contexts. Fundamentally, the respective state actors recognise that the many political, economic and social conflicts within the framework of the CBD need to be dealt with as political issues (although this is not always the case, see below).

Relatedly, the CBD – in contrast to the WTO for example – is a relatively open space for compromise, where different actors can voice their concerns. Thus, it tends to be 'overloaded' by a wide range of issues. This is not necessarily a negative result of its open structure.

4. Current problems and conflicts in the CBD process

Following these general comments on the role of the CBD in the context of the process of globalisation, this paper proceeds with a more detailed analysis of the specific problems and conflicts. The analysis conducted here is not exhaustive but focuses on the possibilities and limits of a democratic politics of biodiversity.

a) Access, benefit sharing and intellectual property rights: Prospects for an in ternational ABS regime

Access, benefit sharing and intellectual property rights emerge as central conflicts from the complexity of the different concerns negotiated within the CBD. This became particularly apparent in Curitiba, and the *Earth Negotiation Bulletin* correctly ascertains that in the coming years, the "highest priority is clearly assigned to access and benefit sharing" (ENB, Vol. 9, 363; Heineke/Wolff 2004).

In recent years a general line of compromise has emerged between governments in the North and South, namely to advance the commercialisation of biological diversity; or rather, of genetic 'resources'. This is guided by the aforementioned principle of 'national sovereignty' over genetic resources, which assigns primary responsibility to states as subjects of international law. In principle, there is no disagreement that access to the components of biological diversity should be protected.

The compromise is evident in the focus on *in-situ* genetic 'resources', whilst the enormous *ex-situ* stock that already exists in public or private gene banks, or botanical and zoological gardens, are not mentioned. It is countries in the global South that can expect economic benefits from *in-situ* sources.

Conflicts exist around the concrete conditions of, and share in, potential gains from commercialisation. This lies at the heart of conflicts regarding 'fair and just' benefit sharing (concretised in Article 8(j) and 15.7 of the CBD).

Protection issues are being increasingly brought into line with the need for an effective appropriation of genetic resources. On this issue, it is the dominant Northern corporations and research institutes who are advancing their interest in appropriating genetic resources in order to commercialise them in the agricultural and pharmaceutical sectors.

Closely linked to questions of access and benefit sharing is the issue of intellectual property rights (IPR; see Heineke 2002; Villareal et al. 2005). Their negotiation continues within the WTO and the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement, as well as within the framework of the World Intellectual Property Organisation (WIPO), which formulated a *Patent Agenda* for the international harmonisation of national IPR regulations a few years ago (WIPO 2002; Correa/Musungu 2002). In light of the current legitimacy problems that have befallen the WTO, and in particular the TRIPs Agreement, the increasing importance of WIPO and its Patent Agenda could be understood as a kind of 'counter-offensive' on behalf of those actors who want stronger IPRs (for further problems in connection with intellectual property rights and natural goods, see Lasén Díaz 2005).

How are latent and open conflicts addressed within the framework of the CBD? The so-called *Bonn Guidelines* of the year 2001, which continue to be negotiated within the framework of the Ad-hoc Open-ended Working Group on Access and Benefit Sharing (ABS) (adopted at COP 6 in Den Haag 2002 with Decision VI/24), signalled a compromise between different governments. However, the implementation of the ABS guidelines is still seen as insufficient. The guidelines are too non-committal and too much emphasis is put on access at the expense of benefit sharing. For this reason, a few years ago the *Group of Like-Minded Megadi versity Countries* suggested more binding mechanisms for access and benefit sharing. At first, their proposal generated little resonance. Since the Seventh Member State Conference in 2004, however, one aim has been the development of an ABS regime, due to problems implementing the CBD coupled with an increasingly evident lack of effectiveness (Decision VII/19). This was a central theme in Curitiba two years later and will also be a central theme in 2008 in Germany.

The international ABS regime – as was previously the case with the Biosafety Protocol, which came into force in September 2003 – reflects the high importance of this particular area of the international biodiversity regime. It underlines the significance of access and benefit sharing, developing knowledge of the enormously complex problems and laying bare concurring interests – especially with respect to the conservation and use of biological diversity. In addition, the regime also provides an important point of orientation for prospecting treaties and national legislation.

The ABS regime was developed as an initiative of industry, coming out of the so-called *Swiss Draft Guidelines*, drawn up at the end of the 1990s and presented at COP 5 in Nairobi. The CBD member states subsequently modified them to constitute the *Bonn Guidelines on ABS*. The legal securing of access and intellectual property, which are in the interest of corporations and governments, clearly take precedent over the rights of indigenous peoples and farming communities.

In actual fact, the regime offers a chance to balance out a great weakness of the CBD, namely that *ex-situ* stocks collected prior to the CBD ratification in 1993 are not included in benefit sharing mechanisms. These could be considered under the ABS regime but, to date, this has not happened.

Most of the existing conflicts pertain to the binding character of the regime. The advance negotiations ahead of COP 8 at the end of January/beginning of February 2006 in Grenada, clearly showed that many governments rejected the Ethiopian government's proposal for a more binding regulatory framework (UNEP/CBD/WG-ABS/4/1). The biotechnology industry and the Northern governments who represent it want flexible access regulations to structure the framework for bilaterial agreements. Especially the so-called JUSCANZ Group – that is the governments of Japan, USA, Canada, Australia and New Zealand – are vehemently opposed to any such legally binding regime. Accordingly, questions of benefit sharing remain marginal.

A regime is less committal than a protocol grounded in international law. The negotiations towards the regime that is to be finalised by 2010 (the mega-diversity countries are urging for 2008), are particularly fierce regarding whether regulations should be binding or voluntary, concrete decisions about access (such as whether it should be 'made easier' or 'regulated'), and benefit sharing. Additionally, the participation of indigenous peoples and local communities, as well as non-state actors as a whole, was discussed in Curitiba with a great deal of intensity (Secretariat of the CBD 2006b: 35). A decisive factor in intellectual property rights will be what concrete form a disclosure of origin will take within the framework of the ABS Agreement. Furthermore, bilateral negotiations will remain key – which works to the advantage of more powerful actors. The non-binding nature of the regime will weaken it vis-a-vis the WTO and the TRIPs Agreement (see below). The inclusion of the aforementioned pre-1993 appropriated genetic resources, already present in countries of the global North that have not undergone a process of benefit sharing, plays no role. The draft that was ratified at COP 8 in Curitiba is full of exclusions, some reflect actual disagreement, whereas others signal mere diplomatic tokenism (Secretariat of the CBD 2006b: 129ff.; for a critical evaluation, see Frein/Meyer 2006).

b) Conservation of biological diversity and the introduction of genetically mo - dified seed

It has been stressed repeatedly that an extensive concentration on ABS loses sight of the primary goal of the CBD: the conservation of biological diversity, meaning hereditary characteristics, species and eco-systems. Although the protection of forests, oceans, or – as at COP 8 – the biological diversity of islands and dry lands are on the agenda of COPs, very little political dynamic develops here. As the large international environmental conservation NGOs or the international network organisation IUCN continue to point out, this complex issue area should certainly not be overlooked. The problem is obvious: in many instances the different uses such as tree-felling or plantations, infrastructure projects, housing developments, large-scale monocultures for soya, sugar cane or oil palms, live stock farming, shrimp farming or oil and gas production stand in contradiction to the conservation of biological diversity.

At the same time, conservation concerns are not separate from the actual use of biological diversity. This is because both these processes require the surveying of

particular territories. However, the findings gathered in such surveys can also be used for commercial purposes. Over the last few years, it has been observed that particularly large nature conservation NGOs such as *Conservation International* or *The Nature Conservancy* have been designating protected areas in which local populations have witnessed bio-prospecting in breach of the CBD the rules. These strategies, which partly go hand in hand with displacement, fit well with the large development plans in biodiversity rich countries such as the Mesoamerican Biological Corridor (CBM). This is because the conservation areas that are financially supported and administrated by the environmental conservation NGOs – together with the World Bank – offer opportunities for bioprospecting (Declaracion Foro Mesoamericano 2002; see also Brand/Görg/Hirsch/Wissen 2008, Ch. 5).

There is another aspect of the conservation of – or rather threat to – biological diversity that has become increasingly important over recent years: the introduction of genetically modified seed. Conflicts were to be expected both leading up to the COP in Curititiba at the Third Meeting of the Member States of the Biosafety Protocol (COP-MOP 3), as well as at COP of the CBD itself. Key was the compulsory labelling of genetically modified agricultural products, which industry wanted to prevent. A compromise was found in that organisms for food, feed and further processing will not have to be clearly identified until 2012 (Fatheuer/Petry 2006). Conflicts also occurred with respect to the attempted legalisation of non-augmentable seed (genetic use restriction technologies; GURTs), on which there has been a *de facto* moratorium since 1999. The reason being that, ahead of COP 8, the governments of New Zealand and Australia – with the US government and interested corporations such as Monsanto in the background - tried to loosen the moratorium and introduce "case-by-case risk assessment and field testing" (ENB, Vol. 9, 363: 21 f.; Blessin 2006; ETC Group 2006). This was prevented in Curitiba due to vehement protest and the judiciousness of a number of governments. The enormous expansion in the cultivation of genetically modified seed is attuned to powerful economic interests. At the same time, it displays a certain recklessness with respect to non-genetically modified plants and animals, as well as the health of human beings. Two recent studies by important US institutions show that the precautionary principle does not carry sufficient weight and that currently an irresponsible major experiment with human beings and nature is underway (Institute of Medicine and National Research Council of the National Academies 2004 on the question of food and health and National Research Council of the National Academies 2004 on the question of the damage to other plants through GMO).

c) Instrumentalisation of indigenous peoples and farming communities

In contrast to other international fora, the importance of indigenous knowledge and indigenous peoples is explicitly recognised (in Article 8(j) of the CBD). Their participation in the political process is welcomed, and it is stated that they should be included in the process of benefit sharing (so-called *Farmers' Rights* have a similar status in the ITPGR of the FAO).

However, this reassessment interferes with the principle of national sovereignty which grants national governments – and not local populations – rightful control with respect to biological diversity. The 'participation' of indigenous peoples and farming communities (in international policy processes, national legislation processes and the negotiation of prospecting agreements), repeatedly declared as necessary, is not constituted legally and thus cannot be enforced (see section 7).

The experiences of previous years display a tendency to instrumentalise indigenous peoples in international politics: they are reduced to a role in which they preserve biological diversity and the knowledge of dealing with it (this is explicitly stated in Article 8(j) of the CBD). Partly, their knowledge of handling biological diversity is used to provide important indications for successful bioprospecting. As independent actors, they have very few far-reaching rights, given that their respective governments claim to represent them. Whilst they are not granted rights, governments and other actors are permitted a good deal of room for manoeuvre through codes that are voluntary. The fact that the rights of indigenous people and farming communities – like the Farmers' Rights of the FAO – are left to national legislation, weakens them considerably.

The dangers of instrumentalisation become particularly apparent when assessing the many initiatives for capacity-building. The effects of the CBD are considered to develop through strengthening the capacity of different actors to act with respect to the protection and sustainable use of biodiversity. Capacity building not only means educating people or making the CBD publicly known, it also means developing comprehensive organisational, institutional and knowledge capacities. However, it is not always clear to what end capacity-building is undertaken. It seems that in many cases it is supposed to improve the conditions for a commercialisation of biological diversity.

The legal strengthening of those actors who depend heavily on biological diversity, namely indigenous peoples and farming communities, is a basic moral and legal requirement of a democratic biodiversity policy process. However, at COP 8 developments pointed rather to their weakening.

d) Implementation weaknesses

The implementation of the regulations agreed to within the framework of the CBD is supposed to take place through national legislation on the one hand and concrete access agreements on the other. The former Executive Secretary stressed that after the formation phase of the CBD (prior to 1992 with the signing in Rio and its subsequent coming into force), the specific framework conditions and the policies were supposed to be developed in a second phase. In a third phase from about 2002, implementation was supposed to be the central focus (Zedan 2005: 2ff).

For this reason, with a view to implementation in 2002, a strategic plan was adopted at COP 6 (Decision VI/26), and accordingly an Ad Hoc Open-ended Working Group on the Review of Implementation of the Convention was instituted two years later (Decision VII/30). It met for the first time in September 2005 in Montreal. The national biodiversity strategies and action plans are to be discussed in detail in 2008 at COP 9.

The overarching orientation is the '2010 Biodiversity Target', formulated in Decision VI/26. The target is the significant reduction of the erosion of biological diversity as a contribution to poverty alleviation. Poverty alleviation is a central Millennium Development Goal of the UN, which with this is taken up by the CBD.

However, implementation remains slow. Biodiversity experts who met in 2006 in Potsdam, "agreed that the Convention has reached a turning point, where after 15 years of work to provide guidance and tools for implementation the focus now needs to be on practical implementation and compliance" (Potsdam Recommendations 2006: 1). Within the CBD it is becoming evermore apparent that national implementation is one of the biggest weaknesses of international biodiversity politics. At the same time, other problems also remain. In particular, the ratification of access agreements is still met with suspicion by governments of the global South and local populations. It remains unclear what exactly is to be understood by the CBD conditionalities of Article 15, "*mutually agreed terms*" and "*prior in formed consent*".² Beyond this, the extent to which states should be obliged to involve indigenous and local communities in the negotiations of such access agreements requires specification. Also, controversy remains as to how binding or flexible the concrete mechanisms should be.

Insufficient implementation is in part tied to the politicisation of specific themes. One such area is that of intellectual property rights, a core component of 'global constitutionalism'. In this area, extensive criticism and resistance continue to occur on different levels regarding what indigenous peoples and farming communities see as an illegal appropriation of knowledge. The implementation of the WTO-TRIPs agreement and the strong IPR regulations in the interests of Northern actors have been a point of contention at least since the Third WTO Ministerial Meeting in Seattle.

In the CBD, questions of intellectual property are considered in conjunction with both access and benefit sharing, as well as in relation to indigenous peoples' rights. It remains to be seen whether the CBD can counterbalance the TRIPs Agreement (and increasingly the WIPO), or whether the CBD will have to accept TRIPs regulations that favour the interests of Northern actors.

² In order to get access the *prior informed consent* (PIC; CBD: Art. 15.5) of the "providers" to access must be attained and access should take place on *mutually agreed terms* (MAT; Art. 15.4). This should be the case not only for access to genetic resources but for all forms of access. Both principles are relatively weak "shall be" clauses, i.e. that governments are urged to take appropriate measures.

Much suggests that the weaknesses in implementation are connected to a systemic blindspot within the CBD. Important actors, in particular governments of countries from the global South, have little interest in the implementation of the CBD because of the competing, and financially profitable, interests in use. The orientation of national economies towards the world market speaks in favour of the commercialisation of natural resources. In addition, there are considerable national legislative tensions between different ministries in individual countries, given their very different foci (for example between economic and agricultural ministries and environmental and health ministries).

Change will only occur when economic and political priorities undergo a profound transformation. However, for this to happen the world economy would need to completely re-orient itself away from the predominantly environmentally destructive focus on exports. This would mean a renunciation of the principle of unconditional free trade. At the national and local level, this would imply a weakening of those economic and political forces that profit from the environmentally destructive economic model.

The basis for this is a democratisation of the politics of biodiversity.

e) Lack of coherence within the CBD and in comparison to other conventions Since the mid 1990s, the coherence between individual policies within the CBD as well as with respect to other international instruments – in particular the WTO-TRIPs agreements – has been called into question (see for example Raustilia/Victor 2004). This was also affirmed at COP 8 in Curitiba: "The Convention is promoting cooperation between all relevant international instruments and processes to enhance policy coherence." (Secretariat of the CBD 2006b: 233). Political coherence is difficult to achieve because the contradictions between individual policy fields – such as environment, agriculture or trade policy – are so large (Petit et al. 2000). Additionally, the individual treaties and organisations such as the CBD, FAO, WIPO and WTO have different interests and power configurations. This cannot be overcome simply through greater coherence.

The biggest problems stem from the relationship between the CBD and WTO (see also LePreste 2002). Years of debate reflect the disparities in opinion as to whether the CBD should have observer status at the WTO and TRIPs Council. In at least four areas, the WTO dominates the agenda.

1) The TRIPs Agreement, negotiated parallel to the CBD, has much stronger regulations with respect to intellectual property rights. It demands that all member states, subject to transition periods for developing countries, legislate nationally on uniform minimum standards for the protection of intellectual property. Article 27 of the TRIPs Agreement determines what can be patented, whereby Article 27.3(b) allows states to prohibit the patenting of plants and animals – with the exception of important micro-organisms – if alternatively an 'effective' sui generis system for the protection of intellectual property is established. '*Sui generis*' means an 'independent' system that does not contradict the basic regulations of TRIPs. To date, the problem has been the limited experience with *sui generis* regulations, for example with cultivated plants, there has been pressure to accept only the International Union for the Protection of New Varieties of Plants (UPOV) as an effective sui generis system.

With respect to the necessity for a Development Round, the declaration of the 4th WTO ministerial conference included formulations that were very close to the CBD. Patents were not to be granted in contradiction to the regulations of the CBD (paragraph 12 Doha Declaration). The Doha Declaration also demanded a stronger exchange of information between the WTO and the multilateral environmental treaties. This demand was the result of a legitimacy crisis following the failed 3rd WTO conference in Seattle. Irrespective of this, the WTO will continue to exert pressure on national and regional ABS legislation – such as the model legislation of the Organisation of African States, the framework agreements in ASEAN, and Decision 391 of the Andes Pact.

2) The WTO promotes an agricultural export model geared towards the world market and dependent on industrialised and chemical inputs. It places profitability above the conservation of nature and of biological diversity. Locally rooted and ecologically sustainable agriculture is often destroyed through the competitive functioning of international corporations. This bias is being sharpened through the negotiations of the so-called Singapore Issues. The Singapore Issues were constituted at the WTO Ministerial Meeting in Singapore in December 1996. They involve negotiations on issues of investment security, competition policies, transparent governance and trade facilitation. Northern governments want to negotiate these issues quickly, whilst many Southern governments reject such haste.

3) Besides intellectual property rights and agricultural issues, a further problem with respect to the dominance of the WTO is the area of *biosafety*. The clear WTO orientation towards trade liberalisation in the agricultural sector conflicts with the regulations, especially with the precautionary approach of Article 1 and 24 of the Biosafety-Protocol – which is not recognised by the WTO.

4) Regarding a fourth danger, namely the influence of the GATS Agreement on the biodiversity regime see section 6.

n the whole, the dynamics of the WTO negotiations are characterised by the organisation's intention to maintain responsibility for all issue areas, subjecting them to the legal regulations of the free trade regime. Thus, forests and genetic goods or other possible 'environmental goods', could be included in the negotiations of 'non-agricultural products' within the WTO agenda. The International Monetary Fund (IMF) and the World Bank are powerful allies of the WTO when it comes to disagreements with developing countries (see Oxfam 2005). In this respect, the recent declaration of the WTO Director General Pascal Lamy, that the relationship between the WTO and international agreements like the CBD is one of "mutual supportiveness", is not unproblematic. This "mutual supportiveness" is allegedly important with respect to intellectual property rights (between the CBD and the TRIPs Agreements). At the same time, the WTO is currently considering questions of access to genetic resources, benefit sharing and prior and informed consent (WTO News 30th May 2006). The CBD's claim to be "setting the global agenda" (which was again emphasised by the Secretariat of the CBD 2006b:233) is tendentially undermined, particularly because the WTO has reservations regarding institutional cooperation with the CBD.

Yet the demand for coherence can become a problem in this context. The CBD, a relatively weak convention in comparison to the WTO, has a tendency to loose coherence in its strict application because the regulations of stronger conventions prevail. Already today, the rights of "indigenous and local communities" (CBD) and "Farmer's Rights" (FAO) clearly have less impact. The constellation of forces within the CBD give a sense that the CBD is not welcomed as a strong counterbalance to the WTO. This was apparent at the last COP in Kuala Lumpur in 2004 when a report about the effects of trade liberalisation on the agricultural sector merely led to the decision that the COP "requests further gathering and incorporation of data on this matter from all countries" (Decision VII/3, 6). This ineffectiveness is in the considerable interest of the countries of the global North. In order to adequately respond to the questions of coherence and effectiveness within the international biodiversity policy process, another systemic factor needs to be take into consideration. There are political and social processes (co-)responsible for the success of the CBD that are not on the agenda. At the fore-front of these are the political and economic structural adjustments of trade liberalisation. The basic task of the CBD is to create intelligent policies and a systematic counterbalance, whilst supporting respective state and non-state forces who are bound to the goals of the CBD. Attention to hitherto neglected weaker interests can only be conducive to fulfilling this task.

f) Forum-shifting

Lack of coherence is connected to other issues that precipitate political problems and tensions. International politics takes place on multiple levels: intellectual property rights in the realm of genetic goods are negotiated within the WTO, WIPO, the FAO and the CBD. Aside from multilateral agreements there are also regional and bilateral processes in which similar questions are discussed.

There is a tendency for more influential actors, such as biotechnology firms and the political forces that represent them, to privilege those levels that better suit their interests. This is not automatically the case, as often many bilateral treaties are more laborious to work through than a single comprehensive multilateral one. Nonetheless, this tendency can be observed.

This tendency has been particularly apparent in the field of IPR in the last few years. When specific political terrains – such as the TRIPs Agreement – are politicised and weaker actors start to question the basis of the process, then those ac-

tors who are criticised look for alternative terrains (Wissen 2003). For example, since the third WTO ministerial conference in November 1999 in Seattle at the latest, growing criticism of the TRIPs agreement is apparent. Many developing countries had not implemented the Agreement despite the expiration of the time limit. Since then the WIPO is systematically being granted much more importance by Northern governments – in collaboration with some Southern ones. Yet it may also be the case that Northern governments come to rely more on the revision process of TRIPs that began in 1999 and is not yet concluded. In recent years, bilateral free trade and investment agreements have become more important. Components of these are topics such as intellectual property rights or access to biological resources.

Forum-shifting enables more influential actors to follow their interests in other political terrains which appear more advantageous to them (on the concept of *fo rum-shifting* see Braithwaite/Drahos 2000, ch. 24). However, the strategy of *fo rum-shifting* is not unproblematic. Such an approach circumvents the kinds of compromises that include less influential actors within an organisation or treaty.

One demand of a democratic politics of biodiversity is to make it difficult for the more influential actors to engage in forum-shifting, and to insist on compliance with rules in order to respect the interests of less influential actors.

g) Maintenance of structural power imbalances

The problems that have been mentioned – with all their particularities – rest on fact that within the CBD, as in the whole political, economic and cultural field, the protection and appropriation of biological diversity is subject to enormous imbalances of power. Power relations are constituted in multiple ways in the biodiversity policy process.

Over the last few years, it has become evident that powerful actors such as Northern governments, along with 'their' research institutes and corporations, ensure their interests in negotiations. Despite the compromise character of the CBD, this tendency cannot be overlooked.

Unequal power relations express themselves in international politics primarily in the assertion of specific positions in documents and decisions. Different governments have varied resources and asymmetrical expertise. For example, at the last WTO meeting in Hong Kong, the USA had over 350 delegates with expert knowledge on different issue areas. Most developing countries have merely a few delegates whose expertise of particular topics is quite general.

The CBD is organised in a more transparent and rational way than, say, the WTO whose negotiations are dominated by extortion, procedural neglect (proposals by developing countries are repeatedly ignored), horse-trading and an 'auction mentality' (even the new WTO director Pascal Lamy has called the organisation "mediaeval"). Even so, in the concrete negotiations within the CBD framework, clear power discrepancies can be observed.

More recent developments point in two directions. On the one hand, the biotechnology industry and its associate organisations' attention to the CBD are increasing, which has to do with the strategies of the CBD itself and with associations such as the IUCN. The International Finance Corporation Group, a member of the World Bank Group, emphasises the increasing importance of biodiversity in its internetbased *Handbook of Market Creation for Biodiversity* and the International Chamber of Commerce (ICC) recently set up a Task Force on the CBD (cf. Secretariat of the CBD 2006b: 25). The aim is to ensure greater responsibility on behalf of private companies who are supposed to provide the framework for the CBD. The criticism is that corporations have a massive influence in shaping the regulations in their interest. This is particularly apparent in the case of the American BioIndustry Alliance (ABIA; www.abialliance.com) which was founded in 2005 by the US biotechnology industry. It seeks to influence the ABS negotiations for a "full patentability of biotechnology inventions and the maintenance of the current minimum standards for the protection of intellectual property" (IP-Watch, No 10/11, 2005/6: 5).

On the other hand, the central dispute at the member state conference in Curitiba was the level of the continued and impressively broad participation of civil society organisations (including corporate associations; see for example the enormous list in the final report by the Secretariat of the CBD 2006b: 5-10). This broad participation also had to do with the high level of politicisation of the issue of genetically modified seed in Brazil (Fatheuer/Petry 2006). Yet, NGO representatives were not welcome in the discussions regarding the participation of indigenous peoples and local communities in the ABS negotiations. Further to this, a discussion is scheduled to take place in the near future on the question of how NGOs are to participate in the whole CBD process (ENB, Vol. 9, 363: 23).

Nonetheless, power imbalances exceed the negotiations themselves. Northern countries are able to put pressure on developing countries through aid or debt repayment demands. Financial resources are located in Northern countries. Thus, one of the central financing mechanisms is the *Global Environmental Facility* (GEF), linked to the World Bank, which in the case of disputes, always represents the interests of the funders, namely Northern governments.

One further power dimension lies in the fact that more influential countries, in particular the USA, do not adhere to the agreed rules. As is known, the CBD has not been ratified by the USA and the US government simply does not abide by the decisions of the WTO made against it in arbitration (for example in the case of cotton subsidies).

Northern governments repeatedly exert pressure in order to prevent 'Southerncoalitions'. This happened at the WTO conference in Cancún at the end of 2003, where after the conference some of the governments left the 'Group of 21' as a result of pressure by Northern governments.

Power relations also have structural dimensions. Governments of countries rich in biodiversity are subject to a kind of 'supply competition' vis-a-vis northern actors, i.e. research institutes and corporations, to commercialise their genetic affluence. They try to gain advantages from bioprospecting through the provision of conducive conditions and in particular, legal safeguards.

Nevertheless, the formation of the *Group of Like-Minded Megadiversity Coun* - *tries* in 2000 and 2001, signalled an attempt to mitigate supply competition through the establishment of a supply cartel (see *http://www.undp.org/biodiver* - *sity/events/Megadiverse_Meeting.html*, the link is broken on the CBD website). The next years will show what effect this group has been able to have.

A further aspect became apparent at the WTO conference in December 2005 in Hong Kong. Brazil and India are no longer mouth pieces for the countries of the global South in negotiations with those of the North. Nor did they oppose the central demands of free trade advocates (in the case of Brazil, this was because this country is itself an agriculture exporting country; and in the case of India, this was partly in exchange for the securing of agreements in other areas, such as the TRIPs review process). For this reason it does not make much sense to speak of a general line of conflict running between countries of the global North and countries of the global South.

Even where access agreements exist, there are very concrete inequalities rooted in the current limitations of observing what happens to genetically modified goods and the knowledge connected to them.

Furthermore, civil society actors, such as corporations, NGOs or indigenous peoples, have disparate resources as well as unequal access to governments. Yet beyond this there are also structural power imbalances inherent in the way the CBD functions politically and the issues that are prioritised. The structure of the CBD and its political dynamics privilege those actors who have an interest in the valorisation of biological diversity.

In the agricultural sector, the changes over recent decades have led to a redistribution of power to the advantage of seed corporations as opposed to local farmers. The enormous power imbalances are evident in the introduction of genetically modified seed which has increased significantly in recent years.

5. Omissions in the CBD Process

Within the CBD and in relation to other fora there are not only tensions and open conflicts. The CBD is also characterised by the fact that certain questions play no role at all, even though they influence the socio-economic and political dynamics in a determinate way.

a) Regulatory difficulties of technological developments

A central dimension in the use of biological diversity is the development and application of new technologies, especially gene technology. Primarily, it is Northern corporations and research institutes who have such technologies at their disposal. For Southern states the transfer of this technology is of key concern (part of the CBD in Article 16). In the 1990s there were still a few attempts by countries of the global South to broach the question of technology transfer. This rarely takes place today.

Yet it appears as if the problem reaches much deeper. Over the last few years, nanotechnology has been developing rapidly. Its effects on the biodiversity regime are not yet foreseeable. The political dynamics are clearly driven by 'cores of technoeconomic transition' in the research institutes and corporations, i.e. by high-tech research and development in the agricultural, pharmaceutical and cosmetic sectors. These developments remain secret until patents or breed protection have been established, which is a decisive element of the competitiveness of corporations. They are almost completely inaccessible to public and political discussion. Only the outcomes of such developments are more publicly negotiable (Becker/Wehling 1993).

Against this backdrop a growing awareness is emerging that the CBD lags behind new technology developments and that the agreed regulations remain ineffective (see for example IUCN 2006b: 3). The envisaged ABS regime should consider this adequately.

b) Biopiracy and the increasing militarisation of the appropriation of nature

In recent years, there has been an increasing militarisation of the appropriation of nature. A militarisation is taking place particularly in regions where the appropriation of nature meets resistance by local populations and where political-legal appropriation is difficult. This is obvious in the case of resources such as oil, but it is also obvious in the case of the appropriation of biological diversity, or genetic goods more generally (Ceceña 2006).

This is about the securing of 'strategic resources' by economically and politically dominant forces, and is embedded in an overarching strategy that the US government has been developing, particularly for Latin America, in recent years. Mexico and Central America, the Amazon basin and the Cono Sur are all to be controlled. Beside the control of natural resources, a further aim is to fight resistance and to ensure a strong presence of the US military or an allied paramilitary, along with the development of a military infrastructure, for which Plan Colombia - and in recent years Paraguay - have been paradigmatic (see Ceceña/Motto 2005). Additionally, the strategy of a 'low intensity war', involving the displacement of many people, has been important in some countries (see also Pineda 2000 on the strategies of the US military). But the development project Plan Panama also has geostrategic-military components, justified on the basis of the need for 'continental security', especially in the 'war on terror' and in the face of failed states that require the intervention of external powers (see also Barnett 2003). Under the rationale of 'ecological security', whole regions and the people who live there are subjected to satellite and military surveillance. The aim is to prevent the local population from migrating, allegedly to protect biological diversity. In many cases however, the actual aim is to prevent protest against bioprospecting (Ascelrad 2002). Similar scenarios are also imaginable for countries outside of Latin America and are already occuring. For example in Iraq the seed sector is strongly geared towards the interests of US corporations.

This increasing militarisation of the appropriation of nature does not play a role in discussions within the framework of the CBD. The impression given is that all the actors agree with the results of negotiations and their subsequent implementation.

This also applies to situations where the unregulated appropriation of biological diversity takes place. In the case of an illegal appropriation, or an appropriation that a local population considers illegal, this is called 'biopiracy' (see also the recent overview by GRAIN 2005 and BUKO 2005, as well as the informative entry at *www.wikipedia.org*). The term signals the attempt to criticise the historical and actual process of what is understood as the illegitimate appropriation of biological diversity and in particular their hereditary characteristics, as well as the appropriation of the knowledge in dealing with biodiversity. From the perspective of critical NGOs or local actors, formal agreements between government departments do not necessarily legitimise certain appropriations, because indigenous peoples and local communities were not party to the process in which the legal framework was developed.

c) Obscuration of asymmetrical gender relations

Previously, gender-specific differences have not played much of a role in most of the policies relating to the use and protection of biological diversity (see FAO 2006; BUKO campaign 2005: 117-124; GTZ 2002; case studies in Howard 2003; for feminist perspectives on sustainability, cf. Biesecker/Hofmeister 2007). The main tension is between the 'donor' and 'recipient' states; or rather, their govern-

ments. Yet different uses – numerous other differentials notwithstanding – affect men and women differently. Women are integrated in different ways into the respective social divisions of labour in the individual societies. This also affects how food and health are handled, as well as other dimensions in which natural living conditions and biological diversity play a role. Women and men are thus affected differently by the erosion of biological diversity, but also by the introduction of new technologies. As a rule, the role of women regarding biological diversity is less acknowledged. In addition, they are subjected far more to the aforementioned forms of militarisation than men.

However, women and men are not only affected differently in their living conditions, but also in their opportunities for political and social organisation. Men usually have greater political representation and are more likely to be part of development projects. The CBD mechanism of benefit sharing will impact upon women and men in different ways.

After roughly 14 years of the CBD's existence, it is a massive failure that there is more or less no consciousness of the gender-specific dimensions of the erosion and use of biological diversity and the related political opportunities. The ack-nowledgement of the role of women in the preamble of the CBD – it emphasises the "vital role … in the conservation and sustainable use of biological diversity" and underlines "the need for the full participation of women at all levels of policy-making and implementation for biodiversity conservation" – is not reflected in the political process. This applies not only to state actors, but also to NGOs and movements. As a first step, it would be helpful to collate and discuss existing knowledge and political demands in order to comprehend their gendered dimensions. There are individual attempts to do this, yet they still remain weak and do not influence the 'hard' political-economic processes.

6. Significance of the Millennium Ecosystem Assessment

The Millennium Ecosystem Assessment (MA) was initiated in 2001. It is coordinated by UNEP with the goal of expanding decision makers' access to the scientific basis for environmental political agency (*www.maweb.org*). In the year 2005 a report produced by over 1360 scientists from 95 countries was issued.

The MA focuses on the significance of eco-system services for overall human wellbeing. It shows that the impact of eco-system services on social development is often underestimated and that they are exposed to rapid and partly worrying change, both directly and indirectly propelled. The most important driving forces include climate change, habitat transformation and overuse, along withl indirect factors such as demographic, socio-political and economic change, science and technology, as well as culture and religion. The concept places the fact that natural living conditions are decisive for social processes at the core of the debate. Nature provides a service to society and this must be appreciated as such.

Besides the principle report, the Synthesis Report on Biodiversity presented and discussed at the 10th and 11th sittings of SBATTA, is also important for international biodiversity policy (alongside this are Syntheses on the General Overview, Desertification, Wetlands, Business, and Health). At SBSTAA, eleven recommendations for COP 8 were developed and have been incorporated into the process (UNEP/CBD/COP/8/3: 16-17). The results are to become part of national strategies on a voluntary basis, whilst more regional assessments are also to be carried out (Decision VIII/9).

From the point of view of international biodiversity policy, there are many interesting points that provide impulses for the CBD negotiations. For one, the notion of eco-system services puts the conservation and sustainable use of biological diversity centre stage. With this, particularly in countries of the global North, the environmental policies on biological diversity could become more important than they have been to date. An eco-system services approach demonstrates how above all richer countries depend upon externalised eco-system services in other regions of the world (e.g. the production of pulp paper from forests in other countries).

Secondly, environmental politics is systematically connected to the concept of human wellbeing and poverty reduction on different regional levels. This connection is often underestimated or obscured by (international) environmental policies, although issues such as participation or locally based knowledge are hugely important. There are references to "winners" and "losers" in specific developments, which highlights distribution concerns (see also IUCN 2006a).

Thirdly, there is an acknowledgement that existing sectoral environment policies (biological diversity, climate, water etc.) are important but limited. This is because environmental policies can only be effective when the interdependencies between different environmental policy areas are understood and taken into consideration on a political level. This would require more integrated policies and fundamental institutional change, which is not taking place at present (MASR 2005: 131).

Fourthly, there is an understanding that a central deficiency of (international) environmental policy has been its overemphasis on individual sectors, thereby underestimating overarching macro-political and economic developments (BSR 2005: 73). Economic and politico-economic dynamics are particularly dominant in environmental questions.

The central thesis of the MA is that the UN Millennium Development Goals cannot be achieved if eco-system services continue to worsen. With this, the MA creates a starting point for a democratic politics of biodiversity. This is because the concept of eco-system services puts distribution aspects on the agenda of environmental policy, thereby enabling better consideration of the environmental dimension in international political economic discussions.

Nevertheless, within the MA there is one dimension which is not given sufficient attention. Whilst economic globalisation is articulated as an indirect driving force in the loss of biological diversity, the massive interests of commercialisation in this diversity, an important factor in political developments, are not addressed.

Additionally, like many other documents, the MA stresses the need for participation. The broad concept of "freedom of choice and action" (MASR 2005: vi) is mentioned in the introduction to the study and is crucial for democratic policies, yet is subsequently absent, even though such a broad understanding provides a suitable point of departure for a democratic biodiversity policy process.

In conclusion, there is one risk that must not be overlooked. The term eco-system services may make it more possible in the medium-term for a treaty that previously had no responsibilities in this sector, but that has a clear commercialisation and privatisation focus, to claim competencies: The WTO treaty on services (GATS). Privatisation of eco-system services could be intensified through a forum-shifting of interested forces. Friends of the Earth International already highlighted this danger a number of years ago (2002). In fact, a few years ago the EU Commission and the Swiss Government put forward the proposal to take up the "protection of biodiversity and landscape" as an environmental service in the GATS negotiations.

7. Opportunities for a democratic biodiversity policy process

The orientation towards an economic valorisation of biological diversity is the norm. In other words, powerful actors come together around the fact that the commercialisation of biological diversity, and in particular genetic goods, is worthwhile for them. This is evident in the huge importance that is attributed to access and IPR policies within the framework of the CBD. Policies for conservation, technology transfer, or the rights of indigenous and farming communities remain secondary. Benefit sharing is still a major source of conflict.

Against this backdrop, what perspectives exist for a democratic politics of biodiversity? What role can the CBD play? With respect to specific problems, possible ways to democratise biodiversity policy have already been suggested. The following concluding sections focus on general directions that will have to be discussed in detail amongst the different actors. The intention here is to initiate such as discussion.

a) Democratisation of science and technology development

The democratisation of science and technology development is crucial. To date, policy has dealt more with the consequences of developments in the 'centres of techno-economic transition'; primarily with the aim of creating a legal framework for the application of technologies, or rather for the handling of risk. The development of the Biosafety Protocol within the framework of the CBD is an example of this.

Yet, if the future of humanity and in particular less influential, i.e. more 'vulnerable' populations, depends upon such technological developments, then these have to become the subject of public and political engagement. The centuries old dominance of western science and the resultant devaluing of other forms of knowledge continues (Lander 2006).

For the conservation and sustainable use of biological diversity this power relationship has to be changed. How this is to occur, is an open process.

b) Disclosing the practices of biopiracy and the actors involved

A number of investigations have shown that the CBD is somewhat in disrepute amongst indigenous and farming communities (Brand et al. 2008). This is because the concrete experiences of many local actors are those of continued illegal and, from their perspective illegitimate, appropriation and the experience of repressive state policies (Burrows 2005, BUKO campaign 2005). The principle of national sovereignty strengthens governments and not the right to self-determination of local actors. Nevertheless, the CBD is still more respected, considered more accessible and potentially more able to represent their interests than, say, the WTO.

At the same time, those actors who are seriously concerned with a democratic biodiversity policy process, need to be much more confrontational with those actors – particularly corporations – who only follow their own interests, yet present them as the collective interest of (global) society. Nature conservation NGOs must also be criticised when they secretly contribute to illegal bioprospecting and potential commercialisation. Despite all the necessary forms of international diplomacy, less dominant concerns, or rather those concerns that are not at all considered, must be addressed. This is not least a question of power and thus of the conflicts with leading economic and political actors. This forms the basis for balanced compromises, effective policies and in the end, a greater legitimacy for the CBD.

That protests do not have to remain ineffective is reflected in a decision of the European Patent Office. Due to international criticism, the patent of the US firm Grace on the seed of the Indian Lilac tree from which a fungicide is produced, had to be recalled because it was not an invention but plagiarism. Furthermore, some of the patents, although not all, were denied to the Firm RiceTec for the Basmati rice it produces in India. There are other examples.

c) Making the concerns of weaker actors more visible

The conflicts within the CBD – and within other fora – are not conflicts between governments of the global North and South. The dynamic is structured by the interests of both the 'donor' and 'recipient' countries.

The scope Southern governments have to shape their own environmental and economic policy is an important factor for the future. The *Group of Like-Minded Megadiversity Countries* will play a significant role in this respect. Nonetheless, the danger here is that in discussions on national sovereignty over resources and benefit sharing, the interests and rights to self-determination of indigenous peoples and farming communities will be insufficiently considered, or not respected at all.

This is not just about governments or member states. Throughout the whole world there are a growing number of social movements and NGOs who stand against the commercialisation of biodiversity and the increasingly repressive means by which nature is appropriated (for example through the displacement of local populations from nature reserves). It is becoming evermore apparent that the dominant policies – on local, national and international levels – are limiting the possibilities for action open to many people.

The cooperation between governments within the framework of international biodiversity policy is regarded as an undemocratic process, whereby the 'national sovereignty' over natural, and thus genetic goods inscribed in the CBD, is criticised. The WTO and the TRIPs Agreement are criticised even more vehemently.

The perspective that is spreading is that common natural and social goods should not be subordinated to private profit motives. In many segments of society there are struggles against privatisation. The increasingly left-wing orientation of governments in Latin America since 1999 is one expression of these struggles. Latin America has become a strategic place where the form in which the appropriation of nature occurs is challenged. But it is not the only place. In India, Malaysia and the Philippines there are also intense conflicts around biological diversity.

Movements are searching for a different type of political institutionalisation to ensure a diversity of knowledge forms and ways of life (regarding this requirement, see for example to the Potsdam Recommendations 2006: 6). A central term that plays almost no role in the CBD is that of human rights. Within the movement there is also the orientation that social innovations primarily come from movements themselves, not from political parties, the state and international bilateral and multilateral treaties. Nonetheless, it is important to legally ensure these innovations.

The CBD could give more space to the concerns of weaker actors. Connected to this is the following aspect.

d) Demanding not only the participation of weaker actors, but also their legally enforceable rights

One of the terms most often used in texts and discussions of the CBD is that of 'participation'. There already seems to be consensus on the issue. In other words, even more powerful actors advocate the broad participation of all affected and politically active groups. Yet the CBD has to expand the concept of participation beyond formal policy processes. It is not just about political participation, it is also about the actual capabilities of these different groups to live their lives and take action. Today, these capabilities are hugely asymmetrical and manifest themselves to the disadvantage of local populations in many regions where people cannot simply relocate in the way research institutions and corporations can (so-called exit-options).

With this the classic question of politics arises: to what end and to whose advantage do specific political and structural processes exist? Which actors are able to participate? What role do corporations play? Where are central conflicts? Where are decision competencies rooted? And in the case of biodiversity policies: Who controls natural common goods? Who is in control of information and knowledge?

A further starting point for a democratic politics of biodiversity is for different actors to make their particular interests public. Often specific interests, in particular those of powerful actors such as Northern governments or biotechnology corporations, are hidden behind notions of a 'common interest' in the conservation and sustainable use of biological diversity.

This includes another aspect: An age-old democratic ideal is to legally bind powerful interests in order to limit them in relation to weaker ones. This classic idea is at the heart of a democratic biodiversity policy process: the incremental expansion of legally enforceable rights for less influential members of society. Stakeholder rights means more than participation as they include processes and sanction methods for enforcing rights.

The pluralism that dominates international politics enables all actors to formally participate in international processes and influence governments and international institutions. De facto, more influential actors such as Northern governments, well-equipped research institutes and large corporations with better material and informational resources and instruments of power, are in more advantageous positions. The basis for democracy then is the conscious strengthening of weaker and under-representeded interests. Such an expansion of rights may precipitate conflict, yet ultimately will increase the effectiveness and legitimacy of political processes.

If democracy is understood as the collective, effective and legitimate regulation of social problems, then questions of power will always be part of this. The Millennium Ecosystem Assessment offers a number of interesting conjunctures in this respect (see section 6).

Democratic biodiversity policy-making is not only a matter for the CBD. Much more, it is a component of both local and state-level policy-making which is central to the democratic shaping of social relations. However, these are not exempt from international developments such as the interest in biological diversity, regional development projects, the WTO and structural adjustment policies.

The CBD and the processes around it play a doubly important role. The Convention has an effect on democratic opportunities on other levels in that weaker actors are granted rights. At the same time, it can hinder democratic development if powerful, unsustainable and undemocratic developments are secured or further intensified. This is where the particular responsibility of state and non-state actors lies within the area of the CBD as well as in other multilateral conventions and organisations. This responsibility must be respected, particularly given the complexity of the conflicts that have been outlined here.

8. The role of civil society organisations

The CBD is seen as relatively open to civil society actors and their concerns. This is particularly apparent at member state conferences and other fora where the access of NGOs is usually considered unproblematic. Other political institutions such as the WTO are much more selective when it comes to progressive interests.

The most powerful civil society actors are the pharmaceutical, agricultural and cosmetics corporations and their associates. They have only come to recognise the political significance of the CBD in recent years, especially with respect to questions of access and benefit sharing. They do not only influence governments at conferences; already prior to these they influence the positions governments subsequently take. Also, they have access to financial resources and technological knowledge, which means they are able to estimate the consequences of certain practices – and thus the required steps for regulation. A more recent development is the aforementioned active formation and aggressive interference of US biotechnology companies in the CBD process with the American BioIndustry Alliance under the directorship of Susan Finston (2005).

It is of particular interest how Northern governments are partial towards 'their' corporations in the JUSCANZ group (Japan, USA, Canada, Australia, New Zealand) who openly promote the interests of biotechnology corporations and research institutes. On the whole they advocate less intervention in questions of indigenous rights and benefit sharing and stronger legal frameworks for intellectual property rights and access modalities. However, corporations do not have a unified position. The Swiss firm Novartis or the Norwegian Novo Nordisk have displayed a definitive will to accept clear regulations in the areas of access and benefit sharing, which is also reflected in the positions of their respective governments. Other corporations, such as Monsanto, clearly regard such regulations as a hindrance (see Brand et al. 2008).

The sector of economically orientated civil society actors also includes consulting firms who are less present in the international policy process and more so in the implementation of policy and concrete projects. Indirectly they play a role in the policy process due to their technical expertise.

A second important civil society group are the nature conservation NGOs. These include the *The World Conservation Union* (IUCN) with headquarters in Gland near Geneva. Many governments and government departments belong to their large international networks. The IUCN environmental law centre in Bonn constitutes one of the most important think tanks enabling the organisation to discuss complicated facts and processes in great detail. The nature conservation NGOs also include the World Wide Fund for Nature (WWF), Conservation Inter national (CI) or The Nature Conservancy (TNC) who have the best access to funds for nature conservation (especially for concrete projects) in the sector of NGOs and non-private capital firms. Recently, the WWF has opened up to social questions and local actors. Within the CI and TNC the dominant understanding of nature conservation is one in which human beings are seen as a source of destruction, thus they need to be kept out of areas that require protection. In areas where rural populations not only live with and from nature, but also shape it considerably through agriculture, this leads to considerable conflicts. NGOs such as CI or TNC who constitute, together with the WWF, 'The Big Three' in the international nature conservation NGO scene, are also officially closely associated with international corporations. In the year 2005, CI acquired over 92 million US dollars and spent over 114 million US dollars (CI 2006: 18-9). The list of supporters reads like a Who is Who of the international business world, as sponsors include Monsanto, Coca-Cola, Mc Donald's, Intel Corporation, Ford Motor Company and Starbucks (CI 2006: 25-6, www.conservation.org, on the policies of the aforementioned NGOs in Mexico, see Delgado 2004: 33-42).

In a broadly discussed critique published in the newsletter of the *Worldwatch Institute* at the end of 2004, Mac Chapin accused the nature conservation NGOs of often acting against the interests of local populations. For example in Chiapas, CI was criticised of collaborating with the military to disperse the local population and of engaging in bioprospecting for transnational corporations (Chapin 2004: 29). In international negotiations in which the WWF has a larger presence than TNI or CI (where the IUCN already has an overwhelming presence), nature conservation NGOs work closely with all governments, making their knowledge available but remaining non-confrontational, i.e. they often do not take a political position. With respect to thematic issues, the *World Resources Institute*, which operates more as a think tank than an NGO engaged in projects, is closely linked to the aforementioned NGOs.

Progressive civil society actors are characterised by their attempts to bring social and ecological questions together and are more likely to represent the positions of Southern governments or local populations in countries rich in biological diversity (on the role of NGOs in the conflicts around genetic resources and intellectual property see Matthews, 2006: 9f. and 21f.). The most prominent in the area of agricultural biological diversity are the small, but very credible and efficient NGOs, *Genetic Resources Action International* (GRAIN) and the *ETC Group* – ETC stands for what they regard as the three biggest problems, namely Erosion, Technology and (corporate) Concentration. ETC Group and GRAIN work closely with the farmers network *Via Campesina*. The *Intermediate Techno logy Development Group* (ITDG) holds similar positions. The *Third World Net work* (TWN) has a long history in other development conflicts as it is a prominent think tank with offices in many countries whose specific focus is on the NorthSouth economic relationship. It undertakes independent research and consultation, as well as regularly producing brochures and books. The topic of biodiversity is addressed by TWN with specific respect to the questions of intellectual property negotiated there. Along with the ETC Group and GRAIN, their website is one of the most consulted for critical positions. *Greenpeace* was barely active in the first decade of the CBD, yet is increasing involved in the conflicts around forest policy, oceanic biodiversity and genetically modified plants, playing an increasing role in the CBD negotiations. A prominent non-governmental representative of indigenous peoples is the *Indigenous Peoples Biodiversity Network* (IPNB), which works closely with other NGOs. Nevertheless, it is evident that with respect to the representation of indigenous peoples many groups are absent. On an international level, civil society groups coordinate through the *CBD Alliance*. A central element of their work is representation vis-a-vis the Secretariat of the CBD, as well as networking and communication via an email list.

In Germany, an important progressive civil society terrain is the Forum for En vironment and Development (Forum für Umwelt und Entwicklung) in Bonn, with its Working Group in Biodiversity (AG Biodiv). The Forum, or rather the Working Group, in which different NGO representatives are active, has had a presence at international conferences for many years and will no doubt play an important role in the coming year. Besides the aforementioned international NGOs such as WWF or Greenpeace who are also active in Germany, the Protestant Development Ser vice (Evangelischer Entwicklungsdienst (EED)), Misereor, and the independent Biopiracy Campaign of the Federal Coordination for Internationalism (Bundeskoordination Internationalismus (BUKO)) are central. The EED conducts studies, engages in publicity and awareness-raising and actively follows a number of different policy processes. In the last five years, the BUKO Campaign has developed into an important actor which seeks to bring the topic of biopiracy to a broader public through campaigns and educational work. The Working Group for Peasant Agriculture (Arbeitsgruppe fuer baeuerliche Landwirtschaft (AbL)) has an outstanding reputation in questions of agricultural biodiversity.

An important communication tool between governments and civil society groups, as well as amongst civil society groups, is the Information bulletin ECO and the Earth Negotiation Bulletin (ENB), both of which seek to provide relevant information during conferences. In this role, the ENB has a more official character.

This short overview already demonstrates how plural the civil society around the CBD is. This is very good for discussions, enabling different perspectives to be articulated. A potentially interesting question for the future is the position of progressive governments in Latin America with respect to indigenous rights – led by the Bolivian government.

The aforementioned NGOs develop their political efficacy in conjunction with other NGOs, academics, government representatives and international institutions who together form so-called epistemic communities that contribute to a collective understanding of problems and develop proposals with respect to certain questions.

The participation of civil society actors in the negotiations of the CBD has many positive consequences. As less powerful actors, NGOs can contribute to certain perspectives being voiced in the formal policy process and possibly being taken up in political-legal regulations. Given the complexity of many relevant matters, along with the uncertainty and ambiguity of political problems and processes, governments are able to turn to the knowledge and experience of many organisations. However, and unsurprisingly, this does not happen in an egalitarian way. The 'influence' of NGOs is much greater when their proposals are similar to the dominant perception of problems and resonate with existing political interests and proposals. The qualities that NGOs consider themselves as contributing to the process are their technical expertise and information provision to enable better intervention by, and cooperation and contact between, NGOs, as well as their lobbying and negotiation abilities (see Matthews, 2006).

What appears as a political neutrality in effect reflects a definite selection mechanism which integrates some actors and topics into the process and ignores, or marginalises, the voices of others.

Nonetheless, there is a negative consequence of NGO involvement, repeatedly expressed by critical NGOs such as the ETC Group (see also Ribeiro 2002). This is that those civil society groups working within the framework of the CBD concede authority to this political terrain and thus contribute to its legitimacy. Within the framework of the CBD itself, criticism of the fundamental focus of international biodiversity policy is barely possible. Yet it is exactly this kind of critique that many local groups and critical NGOs see as necessary. The ETC Group, GRAIN and TWN express this concern most vehemently.

9. On the way to COP 9 in 2008 in Germany

The German government has already initiated its preparatory process for COP 9 in May 2008 in Germany. The Forum for Environment and Development has also met to discuss thematic and organisational strategies. From an academic semi-distance to the process, and as a result of this study, the following aspects seem to be important to civil society actors (these are not exhaustive and have to specified and further developed in collective discussions).

Firstly, a member state conference is always a good opportunity, both before and during, to raise public awareness and fill the public space created with a plurality of activities and voices. This does not require a unified position, but does necessitate a visible basic consensus on important questions. On May 22nd 2007 a 'Nature Alliance' was constituted with representatives from politics, NGOs, corporations, media, science and culture. But undoubtedly there will be other actions to raise awareness. Even so, progressive actors need to be careful not to find themselves too much under the caring wing of corporations such as Bayer or BASF. Otherwise, critical positions could be quickly delegitimised.

It could be beneficial to carry the experiences from other countries in handling biodiversity and the attempts at commercialisation into a broader public. This is even more important in a country like Germany, where the interests of pharmaceutical, agricultural and cosmetics industries play an important role.

Secondly, a member state conference provides opportunities for the different actors to take more direct stands on existing problems and political processes. For example, there is as yet no position paper from the labour associations of biologists on the topic of access and benefit sharing. Also, political foundations who have ties to countries in the global South should engage more with the topic of biological diversity and its socio-economic dimensions (as is the case with this study). In Germany to date it is still the nature conservation perspective that is dominant.

Thirdly, it is thematically important to point to the CBD's weaknesses and impasses, including the causes of these. On these issues, extensive international knowledge has been developed by researchers and civil society actors. German organisations initiated a thematic debate with a so-called Platform Paper and a workshop in October 2006 which did not start from zero but included the many existing experiences (Gura/Brinkmöller 2006, Forum for Environment and Development/AG Biodiv 2006). Critical attention must be paid to topics such as access and benefit sharing – here the ABS regime will no doubt be central –, and the insufficient implementation of the CBD, which are on the agenda for 2008. In the case of the ABS regime it is not just about the 'whether', but also about the 'how'. A critical position should also be formulated with respect to the leading developments towards commercialisation, the omission of many important questions such as biopiracy, the militarisation of the appropriation of biodiversity and the absence of gender issues. A broad discussion should be conducted as to the question of who actually determines the development of new technologies and to what extent they are useful or dangerous. Current technology developments exhibit anything but a democratic process as they take place behind closed doors. Currently, social and political discussion and regulation are only possible after events have occurred. This contradicts the modern demand for a democratic design of society.

In December 2006 about 30 experts developed the so-called Potsdam Recommendations (2006). These are addressed to the German Environment Minister and contain many of the points raised here, as well as others. Yet they suggest that not many tensions exist and point merely to the requirement for more political will. Beyond this, they recommend that civil society organisations should participate in the member state conference and engage in awareness raising campaigns, although the actual existing conflicts are not named (ibid.: 4).

A fourth issue that should be problematised is the embarrassing fact that the host government of the upcoming member state conference still has no biodiversity strategy. The draft of summer 2005 was put on hold after the current government came to power. It is also inadequate that the German Government, or rather, the German Environment Ministry, has expressed the intention of reducing the member state conference to a 'UN Nature Conservation Conference'. This may be important to achieve broader effects (with the polar bear Knut as the mascot of the Bonn member state conference), yet it dramatically constricts the possibilities for addressing current problems within the CBD. Here, a huge opportunity is forgone.

Fifthly, it is important on a thematic level to make links to other developments and fora (see also the aforementioned Platform Paper 2006 and the Potsdam Recommendations 2006). One example: the crucial processes with respect to intellectual property rights are currently not located within the CBD, but in the TRIPs and WIPO negotiations. What role may the GATS potentially play if the concept of eco-systems services becomes more important? Also, the role of bilateral trade agreements must be granted more consideration.

In light of the aforementioned connections, an important point of discussion is that of the basic parametres of the CBD and its current focus on commercialisation. If civil society organisations addressed this, there would be less risk in them becoming complicit in painting the picture (which is gladly promoted by Northern governments) of the CBD as a neutral forum concerned merely with the most effective solution to the respective problems.

Finally: Conflict is a fundamental aspect of a democratic political process, something that is not yet very advanced on an international level. In (global) society, hugely disparate interests and understandings exist as to how the CBD process should develop. Stating this, as opposed to sweeping it under the carpet with the imperative, "We all want the same thing anyway" (i.e. to save biodiversity) is an important task of civil society groups. This is what this study has aimed to show: the conflicts between the respective governments no longer revolve around the commercialisation of nature, but around the how and the distribution of the cake.

In particular situations it can also make sense to strengthen environmental-political state actors relative to economic and financial-political state actors who have little interest in progressive biodiversity policy. Yet this should not become a permanent alliance because in many instances thematic and strategic differences remain.

In conclusion, this paper offers a strategically relevant conjecture. Although the German Government operates within the framework of the EU, which partially limits its room for independent negotiation, it will be important to host a successful COP 9. This may open windows of opportunity for progressive concerns that need to be recognised at the right moment and utilised strategically. For this, knowledge of the complex political processes that have been presented in this study is necessary. Moreover, political-strategic intelligence is required, which in turn emerges from discussions and reflections.

Translation: Emma Dowling

Bibliography

- Acselrad, Henri (2002): Die ökologische Herausforderung. Zwischen Markt, Sicherheit und Gerechtigkeit. In: Görg, Christoph/Brand, Ulrich (eds.): Mythen globalen Umweltmanagements. "Rio + 10" und die Sackgassen nachhaltiger Entwicklung. Münster: Westfälisches Dampfboot, 48-73.
- Baguio Declaration (2004): Baguio Declaration of the 2nd Asian Indigenous Women's Conference, March 8, 2004, Baguio City, Philippines. www.tebtebba.org/tebtebba_files/gender/aiwcdec.html

Barnett, Thomas (2003): The Pentagon's new map. <www.nwc.navy.mil/newrulesets>

Becker, Egon/Wehling, Peter (1993): Risiko Wissenschaft. Frankfurt/M. und New York: Campus.

- Biesecker, Adelheid/Hofmeister, Sabine (2007) : Der Beitrag der Kategorie (Re-) Produktion zur Nachhaltigkeitsdebatte. In: Meier, Klaus/Wittich, Evelin (eds.): Theoretische Grundlagen nachhaltiger Entwicklung. Beiträge und Diskussionen. Manuskripte 64 der Rosa-Luxemburg-Stiftung. Berlin: Dietz, 186-204.
- Blessin, Sandra (2005): Terminator-Technologie. Die Gefahr ist nicht gebannt. In: Forum Umwelt und Entwicklung 1/2006, 10.
- Brand, Ulrich (2007): Paradoxien der Biopolitik. In: Jahrbuch Lateinamerika. Analysen und Berichte. Schwerpunkt Rohstoff-Energie. Münster: Westfälisches Dampfboot.
- Brand, Ulrich/Görg, Christoph/Hirsch, Joachim/Wissen, Markus (2008): Conflicts in Environmental Regulation and the Internationalisation of the State. Contested Terrains: London/New York: Routledge.
- Brand, Ulrich/Görg, Christoph (2008): Sustainability and Globalisation: A Theoretical Perspective. In: Conca, Ken/Finger, Mathias/Park, Jacob (eds.): Sustainability, Globalization and Governance. London und New York: Routledge (in print).
- BSR (2005) Millennium Ecosystem Assessment: Ecosystems and Human Well-being: Biodiversity Synthesis Report., Washington, DC.: World Resources Institute.
- BUKO-Kampagne gegen Biopiraterie (2005): Grüne Beute. Biopiraterie und Widerstand Argumente, Hintergründe, Aktionen. Grafenau und Frankfurt/M.: Trotzdem-Verlag.
- Burrows, Beth (ed., 2005): The Catch. Perspectives in Benefit Sharing. Edmonds: The Edmonds Institute.

Chapin, Mac (2004): A Challenge to Conservationists. In: World Watch magazine, Nov./Dec. 2004.

- Ceceña, Ana Esther (ed., 2006): Los desafíos de las emancipaciones en un contexto militarizado. Buenos Aires: CLACSO.
- Ceceña, Ana Esther/Motto, Carlos Ernesto (2005): Paraguay: eje de la dominación del Cono Sur. Buenos Aires: Observatorio Latinoamericano de Geopolítica.
- Conca, Ken/Finger, Mathias/Park, Jacob (eds., 2008): Sustainability, Globalization and Governance. London und New York: Routledge (in print).
- Correa, Carlos/Musungu, Sisule F. (2002): The WIPO Patent Agenda: The Risks for Developing Countries. South Centre. http://www.southcentre.org/publications/wipopatent/toc.htm
- Declaración Foro Mesoamericano (2002): Frente al Plan Puebla Panamá el Movimiento Mesoamericano pol la Integración Popular, 18.7.2002. http://www.foromanagua.com.ni/documentos/declaracion-III-foro-mesoamericano.PDF>
- ETC Group (2006): Granada's Grim Sowers Plow up Moratorium on Terminator, Clear the Path for its Approval at UN. Press Release, 27 January 2006 <etcgroup.org>

Executive Secretary of the CBD (2005): Annotations to the provisional agenda. <UNEP/CBD/COP/8/1/Add.1>

- FAO Focus (2006): Women: users, preservers and managers of agro-biodiversity. <www.fao.org/FOCUS/E/Women/Biodiv-e.htm>
- FAO Focus (2006): Women: users, preservers and managers of agro-biodiversity. <www.fao.org/FOCUS/E/Women/Biodiv-e.htm>
- Fatheuer, Thomas/Petry, Sabrina (2006): Biologische Vielfalt und Sicherheit: Lichtblicke und Frustration in Curitiba. In: Informationsbrief Weltwirtschaft & Entwicklung.
- Forum Umwelt und Entwicklung / AG Biologische Vielfalt (2006): Biopolitik mitgestalten! Plattformpapier und Positionssammlung von einem Workshop am 26. October 2006. Bonn. <www.forumeu.de>
- Frein, Michael (2006): ABS weiter blockiert. Der Prozess wird jedoch weitergehen. In: Forum Umwelt und Entwicklung 1/2006, 8.
- Frein, Michael/Meyer, Hartmut (2002): Mager und visionslos. Die Ergebnisse der 8. Vertragsstaatenkonferenz der Konvention über die biologische Vielfalt in Curitiba (Brasilien); www.eed.de, 3. April 2006.
- Friends of the Earth International (2002): Implications of WTO Negotiations for Biodiversity. Briefing, April . Amsterdam.
- Gill, Stephen (2003): Power and Resistance in the New World Order. New York: Palgrave.

- Görg, Christoph (2003): Regulation der Naturverhältnisse. Zu einer kritischen Theorie der ökologischen Krise. Münster: Westfälisches Dampfboot.
- Görg, Christoph/Brand, Ulrich (2006): Global Regulation of Genetic Resources and the Internationalization of the State. In: Global Environmental Politics 6(4), 101-123.
- Görg, Christoph/Brand, Ulrich (2001): Zugang und Vorteilsausgleich das Zentrum des Konfliktfeldes Biodiversität. Studie im Auftrag von Germanwatch und dem Forum Umwelt&Entwicklung, (Forschungspreis der Rosa-Luxemburg-Stiftung)
- Goldman, Michael (2005): Imperial Nature. The World Bank and struggles for social justice in the age of globalization. New Haven/London: Yale University Press.
- GRAIN (2005) Genetic Resources Action International: Whither Biosafety? In these days of Monsanto Laws, hope for biosafety lies at the grassroots. <www.grain.org/articles/index.cfm?id=9>
- GTZ Deutsche Gesellschaft f
 ür Technische Zusammenarbeit (2002): The Convention on Biological Diversity. Ensuring Gender-Sensitive Implementation. Eschborn (Germany): GTZ.
- Gura, Susanne/Brinkmöller, Monika (2006): Biopolitik mitgestalten! Zivilgesellschaft startet mit den Vorbereitungen auf die internationale Biodiversitätskonferenz 2008. In: Forum Umwelt & Entwicklung 4/2006, 21-22.
- Heineke, Corinna (ed, 2002): La Vida en Venta: Transgénicos, Patentes y Biodiversidad. San Salvador: Ediciones Heinrich Böll.
- Heineke, Corinna/Wolff, Franziska (2004): Access to Genetic Resources and the Sharing of Benefits: Private Rights or Shared Use for Biodiversity Conservation? In: ELNI Review – Environmental Law Network International 2, 26-33.
- Howard, Patricia L. (ed., 2003): Women and Plants. Gender Relations in Biodiversity Management and Conservation. London/ New York: Zed Books.
- IFC International Finance Corporation (2006): A Guide to Biodiversity for the Private Sector: Why Biodiversity Matters and How It Creates Business Value? <www.ifc.org/ifcext/enviro.nsf/Content/BiodiversityGuide>; visited in August 2006.
- Institute of Medicine and National Research Council of the National Academies (2004): Safety of Genetically Engineered Food. Approaches To Assessing Unintended Health Effects. Washington: The National Academy Press.
- IUCN (2006a): The Millennium Ecosystem Assessment. Position Paper from the The World Conservation Union for the 8th meeting of the COP to the CBD in Curitiba.
- IUCN (2006b): Access and Benefit-Sharing. Position Paper from the The World Conservation Union for the 8th meeting of the COP to the CBD in Curitiba.
- Kaiser, Gregor (2003): Wenn Leben zur Ressource wird. In: ila Zeitschrift der Informationsstelle Lateinamerika, 263.
- Lander, Edgardo (2006): La Ciencia Neoliberal. In: Ceceña, Ana Esther (ed., 2006): Los desafíos de las emancipaciones en un contexto militarizado. Buenos Aires: CLACSO, 45-94.
- Lasén Díaz, Carolina (2005): Intellectual Property Rights and Biological Resources. An Overview over Key Issues and Current Debates. Wuppertal Papers, no. 151. Wuppertal.
- LePrestre, Philippe G. (2002): The Operation of the CBD Convention Governance System. In: ders. (ed.): Governing Global Biodiversity. The evolution and implementation of the Convention on Biological Diversity. Adlershot: Ashgate, 91-114.
- MASR (2005) Millennium Ecosystem Assessment Synthesis Report. Washington, DC: Island Press.
- Matthews, Duncan (2006): NGOs, Intellectual Property Rights and Multilateral Institutions. Report of the IP-NGOs Research Project. London: Queen Mary Intellectual Property Research Institute. < www.ipngos.org >
- Meier, Klaus/Wittich, Evelin (eds., 2007): Theoretische Grundlagen nachhaltiger Entwicklung. Beiträge und Diskussionen. Manuskripte 64 der Rosa-Luxemburg-Stiftung. Berlin: Dietz.
- National Research Council of the National Academies (2004): Biological Confinement of Genetically Engineered Organisms. Washington: The National Academy Press.
- Oxfam (2005): Kicking down the door. How upcoming WTO talks threaten farmers in poor countries. Oxfam Briefing Paper no. 72.
- Petit, Michel/Fowler, Cary/Collins, Wanda/Correa, Carlos/Thornström, Carl-Gustaf (2000): Why Governments Can't Make Policy. The Case of Plant Genetic Resources in the International Arena. Draft. o.O.
- Pineda, Francisco (2000): "Das Meer austrocknen". Grundlagen und Dynamik der Aufstandsbekämpfung. In: Brand, Ulrich/Ceceña, Ana Esther (eds.): Reflexionen einer Rebellion. "Chiapas" und ein anderes Politikverständnis. Münster: Westfälisches Dampfboot, 303-318.
- Potsdam Recommendations (2006): Potsdam Recommendations on the Convention on Biological Diversity, submitted by the Emminent Experts. Workshop on Implementation of the Convention on Biological Diversity, Potsdam, Germany, 13.-15. Dezember 2006.
- Raustiala, Kal/Victor, David G. (2004): The Regime Complex for Plant Genetic Resources. In International Organization 58, Frühjahr 2004, 277-309.
- Ribeiro, Silvia (2002): Biopiraterie und geistiges Eigentum. Zur Privatisierung von gemeinschaftlichen Bereichen.

In: Görg, Christoph/Brand, Ulrich (2002): Mythen globalen Umweltmanagements. Rio plus 10 und die Sackgassen "nachhaltiger Entwicklung". Münster, 118-136.

- Secretariat of the CBD Convention on Biological Diversity (2006a): Global Biodiversity Outlook 2. Montreal </br/>
- Secretariat of the CBD Convention on Biological Diversity (2006b): Report of the 8th Meeting of the Parties to the Convention on Biological Diversity, Curitiba, Brazil, 20-31 March 2006 <UNEP/CBD/COP/8/31>
- Villareal, Jorge/Helfrich, Silke/Calvillo, Alejandro (eds, 2005): ¿Un mundo patentado? La privatización de la vida y del conocimiento. El Salvador: Ediciones Boell
- WIPO (2002): WIPO Patent Agenda. Options for the Development of the International Patent System. Memorandum of the Director General. A/37/6. http://www.wipo.int/eng/document/govbody/wo_gb_ab/doc/a37_6.doc
- Wissen, Markus (2003): TRIPs, TRIPs-plus und WIPO. In: Brand, Ulrich/Görg. Christoph: Postfordistische Naturverhältnisse. Konflikte um genetische Ressourcen und die Internationalisierung des Staates. Münster: Westfälisches Dampfboot: 128-155.
- Wullweber, Joscha (2004): Das grüne Gold der Gene. Globale Konflikte und Biopiraterie. Münster: Westfälisches Dampfboot.
- Zedan, Hamdallah (2005): Statement by the Executive Secretary of the CBD to the Meeting of the Ad Hoc Open-ended Working Group on the Review of Implementation of the Convention, Montreal, 5-9 September 2005.