

***“Overlapping International Regimes: The Case of the Intergovernmental Forum on Forests (IFF) between Climate Change and Biodiversity”*, by G. Kristin Rosendal, The Fridtjof Nansen Institute.**

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Abstract

A great number of organisations and actors are participating in a plethora of international and regional fora geared towards the forest issue. Are there inherent traits about how these fora interact that can increase understanding about why the forest issue seems largely to be at a standstill? In this article I focus on the final meeting of the Intergovernmental Forum on Forests (IFF-4) and examine the overlap with the Convention on Biological Diversity (CBD) and the overlap with the Climate Change Convention (UNFCCC). How have the overlaps between these international fora been dealt with and why has one led to linkages while the other has not?

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Overlapping International Regimes: The Case of the Intergovernmental Forum on Forests (IFF) between Climate Change and Biodiversity

Introduction

Deforestation and loss of biodiversity – ecosystems decay – is regarded by politicians and scientists alike as grave environmental problems requiring immediate action.¹ A great number of organisations and actors are participating in a plethora of international and regional fora geared towards the forest issue. Still, effective problem solving mechanisms are lacking at the international arena and little real progress seems to have been made in the nine years that have elapsed since the forest principles were agreed in Rio. This raises the question of whether there may be inherent traits about how these fora interact that can increase understanding as to why the forest issue seems largely to be at a standstill.

The main focus here is put on the final meeting of the Intergovernmental Forum on Forests (IFF-4) and the examination of how its agenda has been affected by other international regimes pertaining to the issue-area of forest management. In this endeavour, I will limit the focus first to the overlap with the Convention on Biological Diversity (CBD) and second to the overlap with the Climate Change Convention (UNFCCC). How do the functional scopes of these institutions overlap with the IFF programme of work with regard to the forest issue, and to what extent has the overlap led to formal linkages between the institutions?² How may overlap between these international institutions affect the effectiveness of international environmental co-operation within the forest issue?³

The analysis of several regimes active in a single issue-area may bring about lessons other than those that an isolated regime study might engender. There is little knowledge about how institutional interaction and overlap may affect the effectiveness of international environmental co-operation. Presently, we lack both systematic mapping of types of institutional overlap and mapping of effects from overlap. Clearly, within the scope of an article it is hardly possible to provide a full answer to these questions. This also means that we will here be less concerned with central factors such as actor interests tied to the issue-area, in order to focus on the institutional aspects. The aim here is to clarify some central concepts, develop some assumptions, and apply these to the analysis of three central institutions within the forest issue-area.

First, I shall briefly relate the historical and institutional background of the issue at the international arena, starting with the three parallel approaches to forests, biodiversity and climate change in Rio during the UN Conference on Environment and Development (UNCED Conference) in 1992. This is followed by a presentation of how specific items on the IFF agenda has been dealt with by the negotiating parties. The third section provides a brief discussion of the specific situations of overlap and linkages between regimes. Finally, I look

into how the overlaps between these international fora have been dealt with and discuss why one has led to linkages while the other has not.

The Rio legacy

The three environmental problems of global warming, worldwide loss of biodiversity and tropical deforestation arrived at the UNCED Conference in Rio in 1992 as contested issues, which involved conflicting interests and various degrees of scientific uncertainty. The three issues arrived through quite different institutional avenues and achieved rather different results. The UNFCCC was negotiated by an Intergovernmental Negotiating Committee (INC), the CBD was also negotiated by an INC, but under the auspices of UNEP, and both ended up as legally binding framework conventions. Both were formally negotiated between 1991 and 1992, they were signed by a large number of states at UNCED, soon achieved the necessary number of ratifications, and entered into force in March 1994 and December 1993 respectively. The forest issue, in contrast, ended up with a set of non-legally binding Forest Principles.

In the time shortly preceding Rio there were eight attempts to propose the establishment of a forest instrument or convention (Humphreys 1992). All the proposals originated with forest-rich, industrialised countries and five were explicitly linked to tropical forests and / or envisaged as a protocol under the UNFCCC (Rosendal 1995). At the time, there was a deep conflict between tropical and temperate countries, as the latter focused on the problems connected with tropical deforestation – this also provided the background for linking the issue to climate change. Gradually, the negotiating parties came to accept the problems of biodiversity loss associated with the primarily secondary forests in temperate areas, as well as the historical losses of CO₂ in temperate forests (IPCC 1990). In the end, the parties accepted that any forest instrument must address *all types of forests*. Still, the controversies were high and instead of a legally binding instrument the process resulted in the non-binding Forest Principles. It was, however, acknowledged that the international community must continue to address the problems of forest degradation and loss.

It was the Rio creation, the Commission on Sustainable Development (CSD), that was given the mandate to follow up this process and it was the CSD that decided to establish the Intergovernmental Panel on Forests (IPF), later succeeded by the IFF. The choice of giving this responsibility for forests to CSD rather than any other existing forest-related forum may have set an early and decisive division of labour between regimes with overlapping functional scopes.

The problem of forum choice is partly related to the wide variety of functions, goods and services that forests provide for various needs at local, national and international levels. Forest goods range from local provision of food, fodder, firewood and building materials, timber extraction for domestic and international markets, and genetic resources of medicinal use for local and domestic consumption and of economic interest to multinational

pharmaceutical industries. Forest services include local and global climate and water regulations, large repositories of the world's biological diversity with potential and actual economic value, as well as recreation and tourism. In addition, there are the intrinsic values linked to forest species and ecosystems. A complicating factor is that the optimal utilisation of these forest functions, goods and services are not necessarily compatible. Massive timber extraction and increased introduction of plantations may for instance impoverish local people as well as represent a threat to biodiversity.⁴ Looking at these functions, there are obvious overlaps with a large number of international institutions within the forest issue-area.⁵

From the Panel on Forests to the Forum on Forests

The Economic and Social Council, in its decision 1995/226, endorsed the recommendation of the third session of the Commission on Sustainable Development (CSD) to establish an open-ended ad hoc Intergovernmental Panel on Forests (IPF) to pursue consensus and co-ordinated proposals for action to support the management, conservation and sustainable development of forests. The IPF was asked to consider the outputs of a large number of ongoing processes and initiatives and draw upon the expertise and resources of relevant organisations within and outside the United Nations system, as well as from all relevant parties, including major groups. Following the establishment of the IPF in April 1995, an informal, high level Interagency Task Force on Forests (ITFF) was set up in Geneva in July 1995 to co-ordinate the inputs of international organisations to the forest policy process, assisting IPF and later IFF. The ITFF members include the Centre for International Forestry Research (CIFOR); FAO, which chairs ITFF; ITTO; United Nations Department for Social and Economic Affairs (UN/DESA); United Nations Development Programme (UNDP); United Nations Environment Programme (UNEP); the World Bank and the Secretariat of the Convention on Biological Diversity (CBD). The main goal of ITFF is to co-ordinate activities undertaken within the separate regime processes and to provide input in the IPF/IFF process. The secretariat of the UNFCCC is not a member of the Interagency Task Force.

For much the same reasons as during the UNCED Conference, the IPF delegates failed to agree on major issues such as financial assistance and technology transfers, trade-related matters, and whether to start negotiations on a global forest convention. The IPF met four times and gave its policy recommendations to the CSD meeting in April 1997. The IPF recommendations were passed on the 1997 UN General Assembly Special Session (UNGASS) on Agenda 21. The same year ECOSOC, on the recommendation of UNGASS, established the Intergovernmental Forum on Forests (IFF). IFF was mandated to report to the CSD in 2000, focusing on the following programme elements and issues:

- the need for financial resources and transfer of environmentally sound technologies (ESTs) to support sustainable forest management (SFM);
- trade and environment;

- international arrangements and mechanisms to promote the management, conservation and sustainable development of all types of forests;
- underlying causes of deforestation;
- traditional forest-related knowledge;
- forest conservation and protected areas;
- forest research;
- valuation of forest goods and services;
- future supply of and demand for wood and non-wood forest products; and
- assessment, monitoring and rehabilitation of forest cover in environmentally critical areas.

At their fourth and final meeting in New York, 31 January – 11 February 2000, the IFF did reach consensus on a report to be submitted for adoption to the CSD in April/May 2000. The original working text of the report was littered with brackets and the negotiations touched upon a large number of related agreements and their functional scopes. The consensus text of IFF-4 calls for inter alia:

- To establish a permanent intergovernmental body: UN Forum on Forests (UNFF);
- To invite relevant international and regional organisations, institutions and instruments to form a collaborative partnership to support the work of the UNFF;
- Within five years to ‘consider with a view to recommending the parameters of a mandate for developing a legal framework on all types of forests’.

The Forum failed to reach consensus on the creation of an international forest fund.

On many of the agenda items the parties reached agreement on the report text without substantial problems remaining. All the way since the adoption of the Forest Principles in Rio, 1992, however, the question of whether or not to negotiate a forest convention has represented a very controversial issue. Another critical and time-consuming item concerned traditional forest-related knowledge (TFRK), a discussion that largely paralleled those in the negotiations leading up to the Convention on Biological Diversity (CBD) eight years previously in Rio.⁶ These items, as well as that of forest conservation, will be subjected to further examination in the following section.

Overlap between IFF, CBD and UNFCCC

While I will focus on the first two programme elements on the IFF-4 agenda (in Table 1), a quick introduction to the many overlaps between IFF, CBD and the UNFCCC is in order:

Table 1. Overlap between IFF, CBD and UNFCCC: Programme elements and principles.

IFF	CBD	UNFCCC
* traditional forest-related knowledge	equitable sharing of benefits derived from use of genetic resources, prior informed consent: scope for synergies	

* forest conservation	conservation and sustainable use of ecosystems, species and genetic resources – important to reduce biodiversity loss: scope for synergies	conservation of forest ecosystems – important to reduce CO₂ emissions (forests as carbon sinks and reservoirs): scope for synergies
* transfer of financial resources and technology	scope for synergies with GEF ¹	emissions trading, scope for synergies with GEF
* underlying causes of deforestation	deforestation important cause of biodiversity loss: scope for synergies	deforestation important cause also as CO ₂ source: scope for synergies
* trade and environment	prior informed consent, mutually agreed terms	
* forest research	scope for co-ordination & synergies in research	scope for co-ordination & synergies in research
* valuation of forest goods and services ²	large biodiversity repository, medicinals, intrinsic values	global climate regulation is a forest service
* supply and demand of wood and non-wood products	biodiversity represents both wood and non-wood	forests as CO ₂ sink & sources (non-wood product)
* assessment and monitoring	scope for co-ordination & synergies	scope for co-ordination & synergies

¹ GEF is the Global Environment Facility of the World Bank, UNDP and UNEP.

² See second section (the Rio legacy) on forest goods and services.

Traditional forest related knowledge and the CBD principle of equitable sharing

The debate on the IFF agenda item of traditional forest-related knowledge was characterised by several of the same conflict lines and some of the same interest constellations as those characterising the CBD negotiations. Concern for local and indigenous people and their knowledge of forest resources is largely advocated by environmental and developmental NGOs. They are supported in this by some of the ‘like-minded countries’ (North-South bridge-builders) such as Norway and Canada, as well as the more mixed voices of the G77 & China, most notably Brazil and Ecuador.

Box 1: The relationship between CBD, IPR systems and traditional forest-related knowledge

The CBD builds on three main objectives: conservation and sustainable use of biological diversity, and equitable sharing of benefits from use of genetic resources. Patents represent one form of Intellectual Property Rights (IPR) system (along with copyrights and trademarks) and they are becoming increasingly important within the biotechnology sector. Patented biotechnological products frequently build on local, traditional knowledge about e.g. the medicinal traits of genetic resources, often from tropical forests. Patenting is, however, a long and costly business that can primarily be employed by large companies. It is hardly a tool for indigenous and local communities, even though these groups often harbour much knowledge about the use of these resources. In that case, a patent will reward only the one that provided the last piece of a long process. Patenting may thus be

incompatible with the objective of the CBD of fair and equitable sharing of the benefits derived from use of genetic resources.

The potential value of genetic resources and TFRK is contested, partly due to the rather small scope for finding useful products from bioprospecting samples. Still, as an illustration, fewer than 1% of flowering plants has been thoroughly investigated for their chemical composition (Sheldon & Balick 1995:46). Moreover, screening results from Shaman Pharmaceuticals have revealed that of the samples that displayed promising chemical activity, 74% directly correlated with the original ethnobotanical use (Sheldon & Balick 1995:58-59).

The EU member countries are increasingly operating with unified statements in international environmental negotiations. One effect of this is the disappearance of the Nordic coalition, which was very active with regard to IPR systems and equitable sharing during the CBD negotiations. As a result, the Norwegian delegation finds itself more isolated in their views, as there is hardly any coalition building among the members of the JUSSCANZ Group.⁷ Still, the corresponding conflict lines between IFF and CBD led to great similarities in the debate itself. It would at first glance seem surprising that the track, which had already been opened and established by the CBD, should still give rise to such long and heated discussions. Acknowledging the fact that the USA has still not ratified the CBD, the situation may, however, represent less of a puzzle. The USA is still very cautious with regard to any formulations and principles that may shed doubt on the primacy of intellectual property rights and the TRIPs under the WTO or in any way appear as a threat to the biotechnology sector. The USA was supported in their views by Japan, in spite of Japan being a party to the CBD. All references to the work done in this area by the CBD thus had to go through very hard tugs of war. At the end, it seemed more of a surprise that so much of the language and all but one of the references to the CBD were indeed kept in the text of the IFF-4 report.⁸

On several occasions, Japan and the USA pointed to the danger of pre-empting the ongoing process of the CBD, hence arguing for deletion of references to CBD principles in the IFF text. With regard to the CBD principle of equitable sharing of benefits from genetic resources, Namibia spoke of its great importance for developing countries and Norway turned the argument around, saying how this was indeed supporting the CBD process, and far from pre-empting it. The US then turned around to support Norway's as a constructive suggestion, but still tried – unsuccessfully – to remove the reference to CBD article 15, 16 and 19.⁹

One principle emanating from the CBD text – prior informed consent – did not survive the discussions in IFF-4.¹⁰ The transformation of this principle into the domestic sphere of industrialised countries (CBD parties) has not started. The USA argued strongly that including reference to this principle would go beyond the discussions in the CBD, and despite significant efforts on the part of Canada, Ecuador and Australia it was removed from the final text.

Suffice the CBD – or a Forest Convention?

While the item of traditional forest-related knowledge took up a substantial part of the two-week negotiations, it was the institutional question that remained the most controversial

throughout the IFF-4 session. The parties were split roughly halfway on the question of whether to establish a Forest Convention or not. Some countries, most notably Canada and Malaysia, were eagerly fighting for a convention, while most opponents were less ardent, although sometimes equally adamant, as seen in the position of the USA. With one exception (The Forest Alliance of British Columbia, a Canadian NGO) the NGO community strongly opposed a Forest Convention. The NGO community feared that such a convention would distract attention from biodiversity concerns as well as from equitable sharing.¹¹ These misgivings were not put at ease by the fact that it was the two forest rich countries of Canada and Malaysia that were leading the crusade for a forest convention. Both countries are heavily dependent on their forest sectors and both have had to face intense criticism of their domestic forest policies. Many NGOs perceived a forest convention as a way for the lumber industry to seize the forest issue and in the same bargain remove between 50 and 85 percent of the terrestrial species diversity from the CBD. Generally, the NGO community argued that the issue could be handled perfectly well, provided that already established institutions were actually implemented. In this latter argument, they were supported by the USA who spoke in favour of the cost efficiency of utilising existing bodies to deal with the challenges within the forest sector.

Among other opponents to a forest convention, we find Australia, New Zealand, most of the Latin American countries including Brazil, as well as India, Turkey and Zimbabwe. This seemingly heterogeneous group includes a number of more or less forest rich countries from both temperate and tropical areas, and specifically the mega-diversity countries among the tropical countries. The industrialised country opponents generally do not rank among the very forest rich, compared to proponents such as Canada, Finland and the Russian Federation. The many opponents among the developing countries are likely to doubt that the forest arena would provide an equally good bargain as that provided by the CBD.

Proponents for a convention included all the East European countries and the Russian Federation. In addition come Papua New Guinea, Mali, Niger, Benin, Costa Rica, Norway and Switzerland. The proponents' argument focuses on the need for a legally binding instrument as a precondition to achieve political action in an area where action is sorely needed. The countries of the European Union were greatly divided, and the EU, having to make a common stand among proponents and opponents, ended up with mostly wishy-washy statements on this issue. The division can largely be found between forest-rich and forest-poor countries within the EU, with Finland eagerly and Sweden more reluctantly in favour of a forest convention.

The parties finally did manage to reach some sort of consensus on the institutional question. IFF agreed on the establishment of a permanent, but not legally binding forum under the UN General Assembly or ECOSOC. The IFF report specifically asks that the CBD provide input in the establishment of this UN Forum on Forests (UNFF).

Forest conservation and the role of forests in the climate debate

This section will demonstrate the significance of the ecological overlap between forest biodiversity and climate change. I will address the questions of what the overlap consists of and why it has been largely neglected in the international forest debate. The climate change issue has hardly been a subject of debate in the IFF meetings.

Box 2. Scope for ecological compatibility: Sinks and diversity through conservation

Forests represent a significant link between biodiversity and climate change, as they represent a bulwark against atmospheric CO₂ build-up as well as a repository of the genetic heritage of the earth's flora and fauna. Tropical forests have been estimated to contain between 50 and 85 percent of the world's terrestrial species, which is clearly a substantial part of the world's biodiversity. Plants and forest soils play an important part in regulating the global climate by their capacity to absorb carbon dioxide. At the same time, the FAO suggests that tropical deforestation releases an annual 1.5 billion tons of carbon into the atmosphere; about 19% of total carbon emissions worldwide. Temperate and boreal forests are currently less susceptible to deforestation, but have lost substantial parts of their original old growth forest. The old growth frequently represents the richest habitats in their regions and also contains larger reservoirs of CO₂ in the soils (WRI 1991).

Climate change may represent a severe threat to plant and animal life, as many species may not be able to adapt to new, suitable habitats when the old ones are altered (Peters 1988). Rising atmospheric carbon dioxide concentration in itself, temperature rise, changes in rainfall, and sea level rise are all factors brought about by climate change, that may make it impossible for natural populations of wild organisms to exist within their present range. These factors may also leave forests more vulnerable to damage by pests, pollution and disease.¹² *Diversity* will in general render a species less susceptible to the threat of pests and diseases. A high level of diversity or variation within biological communities and species may thus act as a buffer enhancing the survival potential in the face of climate change.

Box 3. Scope for ecological divergence: Sinks and diversity at odds

Viewing forests primarily as a CO₂ buffer is, however, different from appreciating their active value in terms of the full range of the plant and animal species that they accommodate. The link between forests as a “sink” or carbon reservoir and forests as a repository for biological diversity may be less clear-cut as far as remedies are concerned. The quickest and cheapest way to lock up carbon may be to plant uniform, fast-growing softwoods. From the point of view of biological diversity, however, such massive uniformity is synonymous with genetic erosion. From a climate change perspective, reforestation may seem an adequate remedy to solve the problem, while from the perspective of biodiversity, much more weight must be placed on prevention and conservation. In addition, a forest which is left to its own regeneration is likely to have a much greater biological diversity than does a secondary, planted forest.¹³

Moreover, ‘forests’ do not represent a single uniform eco-system, but are made up of different types of systems. Accordingly, while the ‘carbon reservoir’ argument demands primarily that a certain quantity of forests are preserved, ‘diversity’ in addition requires qualitative choices. There are three basic manners in which to conserve and sequester carbon within forest management: First, through forest conservation and preservation, thus conserving existing pools of carbon. Second, carbon sequestration can be achieved by increasing the forest ecosystems through natural and plantation forests. Third, biomass carbon may be transferred into products substituting for fossil fuels (e.g. using plantation wood rather than coal). The UNFCCC negotiations at Kyoto focused primarily at the second option, and hence, plantations came to take central stage (Gillespie 1999:13). Between 1980 and 1990 there was an estimated 88% increase in tropical forest plantations (FAO 1994:269).

Even though forests make up a relatively small part of the climate change issue, the climate change regulations pertaining to CO₂ sequestration – the regulations emanating from the Kyoto protocol – may have very significant impact for forests. The Kyoto Protocol in Article 3.3 provides that:

“The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in each commitment period, shall be used to meet the commitments under this Article of each Party included in Annex 1. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed in accordance with Article 7 and 8.”¹⁴

In the following, I shall point out three areas of problematic implications associated with definitions of the central concepts in Article 3.3 of the Kyoto Protocol¹⁵ – afforestation and reforestation, direct human-induced activities and carbon stocks.

Afforestation is defined as “planting of new forests on lands which historically have not contained forests” (IPCC Guidelines). *Reforestation* is defined as “planting of forests on lands which, historically, previously, contained forests, but which have been converted to some other use” (IPCC Guidelines). The FAO (and most foresters) define ‘reforestation’ as also the “natural or enhanced regeneration of trees immediately following harvest”. The FAO definition would mean that the area that could potentially be claimed as a sink would increase substantially. Under the IPCC definition, many forest management systems (common in boreal and temperate zones) might not be included as reforestation, since land-use change is not involved. Depending on the definitions of reforestation, afforestation and deforestation,

art. 3.3 of the Kyoto Protocol might generate incentives for massive felling of trees before 2007. It could create a rush to convert forests to other land-uses without getting emissions counted, or to acquire credit of great amounts of carbon removal by planting on the same cleared land after 2008. As the UNFCCC parties have yet to reach consensus on many of these definitions, great uncertainties remain.

As pointed out by Finland's delegation, *direct human-induced action* in Art. 3.3 may fail to give credit in a situation when the landowner simply decides not to carry out agricultural practices, hence letting natural revegetation occur. Japan added that the "the target becomes limited to direct human-induced activities if we use the term 'planting' rather than 'establish' in the definition of both afforestation and reforestation". The delegation of the Philippines favoured use of the word 'establishing' rather than 'planting' to include both natural and artificial means. Natural revegetation, which may be the best way to restore habitats from a biodiversity perspective, may be excluded from getting credit in the climate budget. From the point of view of biological diversity, however, the uniformity often associated with plantations is synonymous with genetic erosion. If human-induced activity alone gives credits, there are no incentives to allow for natural regeneration. In this scenario therefore no incentives exist for protecting natural forest, despite the fact that old-growth forests initially sequester more carbon than plantations do. Accordingly, Gillespie (1999:22) has argued: "Simply, the incentive for countries to obtain international currency for sequestering carbon may become more powerful than the soft promises to protect forests and biodiversity". On the contrary, he argues: "Sequestration may create incentives to start or increase the felling of old growth forests, leading to the destruction of biodiversity and replacement of indigenous people" (Gillespie 1999:19).

Regarding *the problem of defining carbon stocks*, EU argued that soil carbon stock must also be counted. Some activities (such as silviculture) may increase the timber biomass stocks at the expense of carbon in soils or other vegetation, resulting in little or no real increase in carbon stocks. On the same note, Finland's delegation pointed out that the forest biomass in Finland is estimated to make up only about ten percent of the total carbon stock, with the remaining ninety percent found in the forest soils. In regenerated areas in northern latitudes, carbon accumulates slowly in tree biomass. Accordingly, if a forest area was being cleared and an equal area would be forested elsewhere (the total forest area remaining constant), there would be a negative CO₂-balance during the first budget period (2008-2012). A related point with regard to forest clearing indicates how sustainable forest management may have little or no effect on the carbon balance. According to members of the Japanese delegation: "Hence, it is important not to overestimate the temporal carbon emission of the tree felling by focusing on the short term carbon balance." Expanding on this point, Japan went on to claim that "harvested wood should also be made part of the carbon stocks". Japan did admit, however, "if harvested wood is included in carbon stocks, incentives to change natural forests to artificial ones may be generated". The exchange goes to show, however, the thin line between synergies and divergence in the area of forest biodiversity and climate change.

On the other hand, the large carbon stocks in soil could become an argument for defining *conservation* of forests as a ‘human induced activity’. If so, the scope for synergies would greatly increase, as this would provide an incentive for including conservation in the carbon budgets and also enhance biodiversity conservation.

These regulations go to the core of the overlap between forest biodiversity and climate change and the results of problem solving in the latter may be contradictory for the former. Currently, the policy instruments associated with the UNFCCC may carry effects that are indirectly opposed to the objectives of the CBD, and forest conservation and management in general.

We have now seen some examples of how various agenda items have been dealt with during the IFF negotiations. These findings will be discussed further with regard to our main questions: How have the situations of overlap between the IFF, CBD and UNFCCC been dealt with? What type of linkages has been made and why did linkages come about or fail to do so? In order to come to grips with these questions, however, we need some ideas about we mean by overlap and linkages between international institutions. That is the topic of the following section.

Overlap and linkages between international regimes

The issue of regime overlap represents a largely unexplored theoretical field and I will draw on the pioneering work of Young (1996) and Stokke (2000) as well as my own (Rosendal 2000, 2001) in approaching these questions. Let us first look at the concept of *overlap*.

In Oran Young’s definition, overlap implies that the functional scope of one regime protrudes into the functional scope of others. Institutional overlap may often result from externalities (unintended consequences) and as such the overlap may not immediately become apparent to, nor be dealt with by, the parties involved (Young 1996).

While overlap is generally defined as an externality, it is also possible to envisage overlap as a result of covert activity, as a strategic move by some of the negotiating parties. This could be the case if, as a way of circumventing the effect of one regime, new ones are sought created to combat and undermine the first. Either way, the determination that a situation is one of overlap may not be straightforward or uncontroversial. An analytical implication of this observation is that it points out the inherent tension between the issue-specific definition of regimes and the notion of issue-linkage taking place within a regime. Not only may the issue-specific regime be influenced by processes in other fora; it may also adopt related aspects of the issue from such arenas. This portrays the caution needed when identifying the often dynamic and contested functional scope of a regime. A related lesson that is emphasised by this observation is that defining and delineating an issue area may in itself constitute a highly political (and controversial) process. On a similar note, the choice of forum in which to debate certain aspects of an issue area may also be a highly political and controversial process (Rosendal 2000).

Regimes are by definition issue specific and they are generally established to deal with specific problems within specific issue-areas. Regimes are overlapping when their policy goals and regulations prescribed for problem solving intersect within the same issue-area. The majority of such overlaps can be assumed to be potentially synergetic as regimes will often build on compatible norms and give rise to mutually reinforcing or complementary regulations. In that case, the scope for tapping synergies is probably high. Within the prolific field of international institutions we are, however, also likely to find a great amount of overlap that comprises diverging norms and rules (Rosendal 1999 and 2001). This gives rise to the question of how parties in international environmental negotiations deal with situations of this kind.

When we talk about *linkages*, this will usually imply that there is awareness among the parties regarding the overlap and also that some type of co-ordinating activity may be sought to deal with the situation and tap the potential for synergies. Such linkages may range from co-ordination aimed at no more than avoidance of wasteful duplication of work, to mechanisms and instruments set up to deal with more serious situations of diverging norms and rules.

Linkages or interplay between regimes can also be conceived of and take place without actual functional overlap between regimes. Stokke (2000) identifies three pathways through which one regime may influence another. First, there may be normative interplay through diffusion of regime features. This could be a situation where principles and regulations that have been found to be effective in a regime within one issue-area are adopted by another regime. Second, there is the situation of political interplay where interests and capabilities spill over from one regime to another. Third, operational interplay may be established to avoid duplication of work between regimes. Operational interplay would imply an institutionalisation of formal meetings among high level officials from the secretariats of the respective regimes. This third category or pathway seems to be restricted to situations of functional overlap between the regimes, while the two first pathways are not necessarily so restricted. In this study we are dealing with a situation where functional overlap does exist and in turn either does or does not give rise to linkages. We ask why linkages are taking place in one situation of overlap and not in another.

According to Stokke (2000), the adoption of norms and principles from one forum to another will become increasingly difficult when these have obvious *distributive effects* among the parties involved. As governments are adhering to an ever-increasing number of international agreements, many regimes will overlap both in terms of issues and in membership. This study allows for an examination of the effect of *parallel membership* in a situation of overlapping regimes. This factor may tend to enhance co-operation by means of increasing *awareness* about the overlap situation and by providing *well-established* answers to common problems. On the other hand, there is also the possibility that parallel membership may bolster existing conflict lines and hence hamper co-operation.

In addition to *normative* linkages, overlap may also involve situations with compatible or diverging *regulations* emanating from regimes. Diverging regulations would presumably

either give rise to increased demand for co-ordination through some kind of linkages or it would lead to a high conflict level among the parties involved (Rosendal 2001).

Analysis of institutional overlap and linkages within the forest issue-area

In this section, the question of dealing or not dealing with overlap is in focus. I shall first address the relationship between the IFF and the CBD and secondly look into that of the IFF and the UNFCCC.

Dealing with overlap – linkages between the IFF and the CBD

In summary, the IFF process was characterised by calls for activities to enhance synergies among the many overlapping regimes in progress within the forest issue-area. Some of the potential for synergies has been tapped with a view to the normative linkages that were made with the principles emanating from the CBD. Operational linkages have also been addressed to some extent through the establishment of the Interagency Task Force on Forests.

The process of adopting principles from one regime or negotiation forum to another may be seen as a normative linkage. One assumption was that in cases of political controversy and clear distributional effects, the spread of norms and principles might meet with resistance from negotiating parties. Still, when such disputes have been resolved in one forum and membership largely overlaps, agreement may presumably be more easily achieved the next time around through political linkages.

With regard to the agenda item on traditional forest-related knowledge, the level of controversy was high both in the CBD and the IFF discussions. Nevertheless, as such a large number of parties have ratified the CBD, the *legitimacy* of referring to the CBD principles may have been high despite USA's rather isolated stand.¹⁶ Legitimacy thus seems to account for some of the success of the co-operative, bracket-removing spirit of the IFF-4. Another central explanation of the emerging consensus on this contested item may be that the issue in general ranks very high on the G77 agenda. No progress could have been made in the forest issue at large without an acceptance of the importance of traditional forest-related knowledge and the importance of protecting the rights of poor countries over their genetic heritage vis-à-vis IPR systems (see Box 1). On this particular item, the forest rich tropical countries hold largely the same capabilities as they did in the CBD negotiations. Partly they can rely on negotiation power due to sheer numbers and the G77 coalition and partly they have a certain level of issue-specific power through some degree of controlling a substantial part of the resources subject to negotiations.¹⁷ In addition, many lessons and arguments could be transferred directly from the one forum to the other. On the same note, it may also have helped that the same member countries to some extent could play the same role as they did during the CBD negotiations. The effect of legitimacy may be seen as a pathway for normative linkage between fora, while the effect from employment of parallel capabilities may be a pathway for what may be called political linkages.¹⁸

As membership is greatly overlapping in these two global arenas, it is hard to distinguish between norms entering overlapping regimes by way of normative diffusion and the adoption of such norms through pusher countries with similar interests and the same level of power capabilities. We have seen that the G77 could rely on both negotiation power and issue-specific power to uphold their victory from the CBD arena. Thinking of this diffusion process in terms of political linkage does, however, shed light on how the same policy strategy may also engender a higher level of conflict. This may be the case when a conflict is inherited from one regime to another. What may actually have helped negotiations in the final IFF round, is the much less outspoken North-South division, as compared to the CBD arena. The forest issue is characterised by a greater number of crossing conflict lines, between forest rich and forest poor countries, and between needs and concerns at the global, national and local level (Rosendal 1995:95). On many of these items, delegates' views are divided into groups that include both developing and developed countries.

On the other hand, the lack of strong coalitions (such as the Nordic coalition) may be one of the explanations for the eight years of practically standstill since the UNCED Conference. The great many issue-links to other regimes may also have worked both ways. This pertains to the central question of how institutional overlap is likely to affect efforts at improved international environmental co-operation. Most likely, we are not likely to find unambiguous proof that overlap is either enhancing or hampering such efforts.

Another important factor involved in the IFF debate seems to be the *high level of awareness* of institutional overlap. Institutional overlap will often, at least in the early phases, be unintentional and thus possibly give rise to externalities. Most of the overlap in the forest sector that we have examined so far is, however, acknowledged. The acknowledgement has spurred activities to avoid externalities and seek rather to capture potential synergies in the issue-area. This resulted in the establishment of *operational linkages* such as the Interagency Task Force on Forest (ITFF). The potential scope for inter agency turf wars was (and is) high in this field and that might have bogged down the forest issue considerably. Whether or not the lack of turf-wars is due to the ITFF, the establishment of such a task force is an indication among the parties of a commitment to tap the potential for synergies between these overlapping institutions. This seems to support our assumption that a high level of awareness could be seen as a necessary condition for enhanced co-ordination and hence increase the potential for effectiveness in international co-operation.

Another finding is that institutional overlap within an issue-area involving *distributive* elements as well as *early phases of regime formation* may tend towards hampering environmental co-operation. There are indications of this effect in the argument by reluctant parties about avoiding pre-empting or disturbing work in progress elsewhere. During the *early phases* it can be assumed that contentious items and principles have not been fully hammered out, and hence, their diffusion to other fora will be impeded. This may have been the case with regard to the trade and environment item that remains unresolved in WTO and IFF alike.

The role of related and linked institutions was also eminent in the discussion on whether or not to establish a legally binding instrument – a forest convention. Most opponents pointed to existing institutions as a main reason for not establishing yet another. Still, reference to these other bodies may also have been used as a sham, in order to hide ulterior motives, such as a wish to postpone action. Ulterior motives may also be suspected among the parties that were most eager to establish a new legally binding forest instrument. For instance, it is symptomatic that most of the countries in favour of a forest convention are very forest-rich in the case of industrialised countries, or moderately to very forest-poor in the case of developing countries. In forest-rich countries the forest sector (lumber industry) can be assumed to have had a strong position in the domestic formulation of negotiation mandates. Hence, the goal of increased timber extraction can be assumed to override concerns for forest conservation. In the case of most forest-rich developing countries, however, the need to retain the principles from the CBD seems to have overrun this concern. Another explanation may be that the CBD is a framework convention, which is mostly lacking specific obligations. Hence, the forest-rich, developing countries may be apprehensive that a forest convention would imply lost sovereignty over their forest resources to a greater extent than does the CBD.

This debate also indicated the importance of factors other than those directly related to international regime overlap in accounting for the negotiation output. Factors at the domestic level are significant in this regard. For instance, the Norwegian position may indicate that a two-level game is characteristic of how this agenda item was dealt with.¹⁹ Despite opposition from both the Ministry of Environment and the Ministry of Foreign Affairs, the Ministry of Agriculture had succeeded in procuring a mandate allowing them to endorse a forest convention.²⁰ Likewise, the surprising turn-around by Malaysia from ardently opposing a forest convention in Rio, to becoming its most eager advocate, has largely been explained by domestic factors – changes in interministerial responsibilities.²¹

Looking at the domestic situation through the ‘overlap perspective’, however, we see that even though country membership between two arenas are overlapping, there is not necessarily overlap between individuals in the national delegations. On the one hand, it is sound that the sector ministries most affected by an international agreement are directly involved in the negotiation phase of such agreements. This is not least important for dealing with the forest issue, as the forest sector in general was largely absent from the CBD negotiations. On the other hand, this means that much momentum is lost as related aspects of an issue-area are transferred to and dealt with by other departments. This places added responsibility on national ministries to pool their resources and co-operate to find synergies.

So far we have dealt mainly with the *normative* and *operational* linkages within the forest issue-area. The linkages are largely concerned with broad principles and overall policy objectives. This is partly due to the fact that the forest issue is still in the normative stages of negotiation and still some way from the regulatory stage. Nevertheless, this may divert our attention from the fact that there are also *regulations* being formulated elsewhere with great potential implications for forest management.

Not dealing with overlap – lack of linkages between the IFF and the UNFCCC

As we turn to look at the Kyoto Protocol and the climate change process it becomes apparent that the scope for synergies is still very high (Box 2) but that this has hardly been tapped into at all. Neither has the potential dilemma associated with forest biodiversity and climate change (Box 3) been subject to discussion within the IPF/IFF negotiations. The lack of linkages is even more surprising in light of the strong efforts to link forests to climate change prior to and during the UNCED conference in Rio. It would hardly suffice to blame it all on some sort of counter-reaction. How then can we explain these differences in dealing with institutional overlap? Why has the climate change process made such a small impact on the forest debate, despite its significant potential to affect the forest sector? Are there any patterns in the different way the linkages to the CBD norms and principles have been dealt with compared to the regulations emanating from the climate change regime?

One reason why this topic has not entered the IFF process may be the absence of the UNFCCC Secretariat from the Interagency Task Force on Forests. Still, this only raises the obvious question of why the UNFCCC was not included. A way of explaining the situation could be to point out that the normative overlap between the IPF/IFF and the CBD has received a *high level of awareness* among dominant groups of parties (such as the G77) for a long time and that the CBD principles are *well established* among the great number of parallel actors. In contrast, the regulations emanating from the Kyoto protocol still rank as a fairly novel event. These regulations are hardly well established in international negotiations, as they have not been ratified by the sufficient number of parties. Even though overlap in membership is high here as well, many actors may not be fully aware of the implications of these regulations. Equally important, the implications in terms of costs and benefits do not impinge on established groups or coalitions of countries. In addition, the UNFCCC seems a much more closed process as far as those overlaps are concerned and the responsible governments do not seem to be fully aware of this development.

Diverging regulations were presumed to give rise to either increased demand for linkages or a high conflict level among the parties, but so far lack of awareness or *concern* in these early stages of the ‘forest regime’ seems to have prevented action. Moreover, the most zealous actors in the forest negotiations, those advocating the economic interests of the timber industry, have few incentives to oppose the Kyoto regulations. These regulations seem to fit into a position where timber production ranks as a more important concern than protection of wildlife or the rights of indigenous and local people. Timber production is more easily reconciled with national level concerns – and is thus more easily accepted in negotiations between states – while concern for biodiversity and indigenous people is associated with global and local levels.

This discussion may lack realism, as there are still great uncertainties with regard to whether the Kyoto Protocol will ever enter into force. These uncertainties may in themselves provide part of the explanation why the climate debate has been so self-absorbed. Many parties have been eager to see the Kyoto Protocol ratified and they are apprehensive about opening up the negotiation process to novel interpretations and linkages.²² While many

observers believe that the USA is never going to ratify the protocol, there is nevertheless a high probability that CO₂ quota systems will emerge. A system of tradable emission quotas is a hot issue at the EU agenda, and many others are likely to follow once the EU establishes such a system. Will this mean that there is more or less likelihood of finding synergetic solutions to the ‘forest biodiversity – climate change dilemma’? What kind of control mechanisms can be employed with regard to monitoring the type of incentives that will come on board for the forest sector? It is hardly far-fetched to envision an unholy alliance between the timber industries and central, public authorities in the aim to reap increased revenue from plantations, rather than support costly conservation projects.²³ This observation is supported by recent findings in an economic analysis of the forest sector in Madagascar, conducted by C. Kremen et al. They conclude that: ‘Conservation generated significant benefits over logging and agriculture locally and globally. Nationally, however, financial benefits from industrial logging were larger than conservation benefits’ (Kremen et al., 2000). At the Hague meeting in the fall of 2000, the UNFCCC discussed the acceptability of forest-related carbon contracts between developed and developing countries – without reaching consensus.²⁴

Conclusions – and broader lessons?

Can we draw any general lessons about the effects of overlapping regimes on the scope for co-ordination and for increasing the potential for effectiveness in international environmental co-operation?

Well-established principles linked with a *high level of awareness* were seen to have a higher chance of carrying sufficient legitimacy to sway negotiations towards making normative linkages. This is largely in agreement with Stokke’s findings in the ocean coastal management study. He points out that normative linkages may occur in spite of distributional conflicts given ‘particularly advanced or successful regime features’ and especially when ‘the set of interests represented are compatible’ (Stokke, 2000:26). This again links up to my other finding, regarding how the actors display a high degree of *overlap in membership* between the two arenas. To some extent, this seems to have enhanced the scope for normative and political linkages between IFF and CBD as some of the same arguments and coalitions could be employed. On the other hand, the global membership is also accompanied by a high degree of crosscutting conflict lines that seems to have worked in both directions.

While it was possible to link up to largely *compatible norms* in the overlap situation between the IFF and CBD, the *diverging rules* emerging from the UNFCCC regime have not given rise to any kind of linkages. There are no signs of normative or political linkages and no efforts to establish operational linkages between IFF and UNFCCC. The study has given no conclusive evidence as to whether this is due to the early stages of the Kyoto part of the UNFCCC or whether the lack of linkages is the effect of strategic deliberations on the part of specific actor interests. Nevertheless, the situation brings into focus the broader questions of the effect of overlap that involves diverging norms and regulations, as well as the effect of overlap

between regimes in different phases of development. The study also shows that effects from overlap that involves diverging rules may be asymmetric: The potential negative effects from a biodiversity perspective are larger, at least in the short term, than the potential negative consequences seen from a climate change perspective.

The forest issue-area provides a number of examples for the study of regime overlap and there are several more potential linkages to look into. We have seen indications of how overlap may be used strategically in order to further specific actor interests, such as those linked to timber production. More knowledge is needed both about the nature of overlap as well as the relationship between institutional overlap and actor interests. Some of the lessons provided by this study seem to have the potential for a broader explanatory use, as indicated by the similarities with Stokke's conclusions. Still, there is clearly a need for additional case studies in order to approach general lessons about the effects of overlapping institutions on the effectiveness of international environmental co-operation.

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Notes

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¹ *Biological diversity* is a broad concept that has been used to embody the variability among all living organisms, including diversity within species (genetic diversity), among species and among ecosystems. The CBD defines *genetic resources* as genetic material of actual or potential value.

² *Regimes* have been defined (Krasner 1982:185) as 'implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given issue-area'. *Institutions* are more broadly defined as 'recognized patterns of behaviour or practice around which expectations converge' (Young 1982:277). *Regime* and *institution* are frequently applied interchangeably, as I will also do.

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- ³ Effectiveness concerns the clarity and scope of international regulations with a view to implementation. For studies concerned with effectiveness in international environmental co-operation, see for instance Young (1994), Andresen & Wettestad (1995), Underdal (1992) and Levy, Young and Zürn (1994).
- ⁴ On the diverging interests of local, national and global needs within the forest sector, see Rosendal (1995:95).
- ⁵ In addition to the CBD and the UNFCCC, overlap is likely to occur with the Convention on International Trade in Endangered Species of plants and animals (CITES), the Food and Agriculture Organization of the United Nations (FAO), the International Tropical Timber Organization (ITTO) and the World Trade Organisation (WTO).
- ⁶ The data in this section is largely based on the author's own interpretations as well as discussions with other participants at the IFF-4 meeting. The author participated in the meeting as part of the Norwegian delegation.
- ⁷ JUSSCANZ here consisted of Japan, USA, Switzerland, Canada, Australia, Norway and New Zealand. Much formal coalition building in international environmental negotiations takes place in preparatory meetings among groups of parties.
- ⁸ Report of the Intergovernmental Forum on Forests on its third session. E/CN.17/IFF/1999/25. Geneva 3-14 May, 1999, pp. 15-16. Also Report of the Intergovernmental Forum on Forests at its fourth session, New York 31 January – 11 February 2000, p 20.
- ⁹ The US views article 16 (5) as particularly threatening, as it demands that IPR systems do not run counter to the CBD objectives of conservation, sustainable use and equitable sharing of benefits.
- ¹⁰ The PIC principle does not originate with the CBD, as it has already been used in the pesticide issue. Within the CBD context, the principle of prior informed consent implies, in legal terms, that the country providing genetic resources (*owner country*) must provide national legislation regulating the access to and appropriation of genetic material.
- ¹¹ These NGOs included Friends of the Earth (FoE), Greenpeace, Sierra Club, Indigenous Peoples of Tropical Rainforests, Canadian Environmental Network.
- ¹² Approximately 30% of the vegetation of the Earth may experience a shift as a result of the predicted climate change (WRI, IUCN and UNEP 1992: 321).
- ¹³ In the UNEP Global Biodiversity Assessment (1995) plantations have been described thus: 'When industrial tree plantations are based on exogenic species, much of the native biodiversity is inevitably lost, especially through the active suppression of competing species, parasites, etc. Although plantations can be managed to maximise species diversity they are unlikely to attain the biodiversity levels of natural forests and should not be regarded as an alternative to natural forests..' (UNEP 1995:751).
- ¹⁴ The Subsidiary Body on Scientific and Technological Advice (SBSTA) 8 interprets Article 3.3 in the Kyoto Protocol to mean:
- "The adjustment to a Party's assigned amount shall be equal to verifiable changes in carbon stocks during the period 2008 to 2012 resulting from direct human-induced activities of afforestation, reforestation and deforestation since January 1990. Where the result of this calculation is a net sink, this value shall be added to the Party's assigned amount. Where the result of this calculation is a net emission, this value shall be subtracted from the Party's assigned amount."
- ¹⁵ Country positions and arguments referred to in the following are found in the FCCC/CP/1998/MISC.1, UNFCCC CoP, Fourth Session, Buenos Aires, 2-13 November 1998, Item 5 (a) of the provisional agenda, 'Matters related to the Kyoto Protocol, Matters related to decision 1/CP.3, para. 5. See <http://www.unfccc.de/cop4/resource/docs/cop4/misc01.html>
- ¹⁶ There are 175 ratifications, including most of those countries present at the IFF meetings.
- ¹⁷ On negotiation power and issue-specific power, see Underdal 1997.
- ¹⁸ Olav Schram Stokke (2000) seems to restrict political interplay to situations where parties threaten to use their position in forum (a) to persuade other parties to do something in forum (b) and to situations where capabilities in one forum affect capabilities in another.
- ¹⁹ This section builds partly on interview with Anne Marie Skjold, the Ministry of Foreign Affairs (20.01.00) and partly on the author's own observations during the IFF-4.
- ²⁰ Delegation members from the Ministries of Environment and Foreign Affairs felt uncomfortable with this position, as their Ministries had been representing the high-profiled Norwegian championship during the negotiations of the CBD objectives.

²¹ Ans Kolk argues that ‘After UNCED, jurisdiction over forests was moved from the Ministry of Foreign Affairs to Primary Resources, which contributed to a depoliticisation of the issue and a more co-operative behaviour’ (Kolk 1996: 162).

²² Håvard Thoresen, Norwegian Ministry of Environment, personal communication, June 2000.

²³ A relevant example is found in the contract between Tree Farm, a Norwegian company that specialises in trading quotas from carbon plantations in combination with sale of timber, and Industrikraft Midt-Norge, a Norwegian company that is about to build a gas-fired power plant. Industrikraft is investing NOK 80 - 120 million (US\$ 9,5 – 14,3 million) for 4 million tonnes CO₂. This equals two years of emissions of carbon dioxide from the planned gas power plant. Tree Farm’s plantation in Uganda is criticised by environmental NGOs for being planted with fast-growing eucalyptus and pine trees and the planting necessitates the removal of about 8000 local farmers and fishermen from their homes. (Harald Eraker, NORWATCH, NRK P2 12 April 2000.)

²⁴ Several rich countries (the US, New Zealand, Australia, Norway) want a broad definition and flexible use of carbon credits. In the US the carbon sink mechanism is used to persuade Congress to accept ratification of the Kyoto Protocol. European countries have employed a cautious stand, awaiting the IPCC report. The poor countries are divided: India, China and many Southeast Asian countries are opposed to forestry projects as part of the Clean Development Mechanism, as they would rather see investments in industrial projects as a means for increased technology transfers. African countries are hesitant, as they are afraid to lose farmland to tree planting, while at the same time having too weak an industrial base to benefit much from industrial investments only. Some of the Latin American countries, most notably Costa Rica have high stakes in eco-tourism and are thus much interested in improving their forests (Boukhari, 1999).