

**Multilateral Environmental Agreements,
Trade and Development:
Issues and Policy Options Concerning
Compliance and Enforcement**

**A report for the Consumer Unity & Trust Society Jaipur, India
funded by the Department for International Development, UK**

Dr Eric Neumayer, London School of Economics and Political Science

TABLE OF CONTENTS

1. Objective	3
2. The importance of compliance and enforcement	4
3. Approaches to strengthen compliance and enforcement	10
4. The Sticks approach (negative measures)	13
5. The Carrots approach (positive measures)	20
6. Sticks or carrots?	26
7. The carrots and sticks approaches in the reality of MEAs	37
7.1 The Montreal Protocol	41
7.2 The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	44
7.3 The Basel Convention	46
7.4 Carrots or sticks: which approach has been more effective?	48
8. Conclusion	51
9. Policy recommendations	53
References	57
Box 1: Prominent examples of illegal activities as a consequence of non-compliance and non-enforcement of MEA rules	8
Box 2: The compatibility of trade measures in MEAs with WTO rules	29
Box 3: The three MEAs under focus in this study	40

Furthermore, we should not forget that enforcement in developing countries is strongly linked with developed countries' compliance with their obligations to assist in capacity building. (Siri Bjerke, Minister of Environment Norway, 9 February 2001).

1. OBJECTIVE

This report aspires to examine the role of provisions for technology and financial transfer as well as capacity building as an alternative to trade measures in multilateral environmental agreements (MEAs) to improve compliance and enforcement in developing countries.¹

Compliance and enforcement defined...

In accordance with the United Nations Environment Programme (UNEP) compliance is defined here as the fulfilment of a party's obligations under a MEA (UNEP 2001a), whereas enforcement refers to 'the full range of procedures and actions available to States to promote national compliance with domestic law, to deter non-compliance, and to address instances of non-compliance' (UNEP 2001b).

2. THE IMPORTANCE OF COMPLIANCE AND ENFORCEMENT

Pacta sunt servanda:

Compliance and enforcement is required...

Why be concerned about compliance and enforcement? One could argue that the best rules contained in MEAs are not worth the paper they are written on if the same rules are not complied with and enforced by the member countries to the MEAs. From a legal point of view, in general all countries, which have signed and ratified a MEA, have the duty to comply with and enforce the rules of the MEA according to the principle *pacta sunt servanda*. But in practice there is widespread non-compliance and non-enforcement with respect to many MEAs. Later on we will see, however, that not all forms of non-compliance and non-enforcement are necessarily unexpected or undesired. Whilst there is reason to be concerned about non-compliance and non-enforcement, their presence is not bad in all instances.

Non-compliance and

non-enforcement are not easily detected...

It is clear from the definitions given above that whether or not a country complies with and enforces the rules of a MEA is subject to interpretation and can be a contentious issue. This is the more so given that often treaty language is vague and ambiguous on important aspects. It is also clear that countries might comply with and enforce some rules of a given MEA, but might fail to do so with respect to other rules.

Compliance and enforcement

with environmental MEAs are difficult to achieve...

It is important to note that compliance with and enforcement of MEAs is often more difficult to achieve than is the case for some other international treaties. This is because, contrary to for example arms control or human rights treaties, MEA rules require governments to alter the behaviours and actions by private agents rather than by governmental authorities (Mitchell 1996, p. 17). In this they are similar to, for example, the WTO Agreement on Trade Related Impacts of Property Rights (TRIPs Agreement), which also needs to exert control over private agents in order to perform effectively.

Rules should be designed to facilitate verification...

MEA rules should in principle be designed such that compliance and enforcement is facilitated and is easily verifiable. Mitchell (1996, p. 23) provides a good example for this: 'In switching from limiting intentional oil discharges to requiring oil tankers to install expensive pollution-prevention equipment, the International Convention for the Prevention of Pollution from Ships elicited compliance from tanker owners with strong economic incentives not to comply because non-compliance would have required the cooperation of a ship-builder, a classification society, and an insurance company in constructing what all knew to be an illegal tanker'.

Efforts exist to improve

compliance and enforcement in MEAs...

There have already been many efforts to improve compliance and enforcement in MEAs during the 1990s. As Jacobson and Brown Weiss (1998, p. 513) suggest 'there was

greater attention over time to implementation and compliance and to strengthening the supervisory mechanisms. The treaty budgets increased, secretariats generally grew modestly in size, and more attention was paid to monitoring and compliance. The functioning of the Montreal Protocol's Implementation Committee and the adoption of the noncompliance procedures are strong examples of this trend'.

**But compliance and
enforcement issues have been neglected...**

These efforts notwithstanding, there is a widespread impression that compliance and enforcement have been somewhat neglected in the sometimes hectic process of drafting, negotiating and concluding MEAs that cover ever more aspects of the environment ever more comprehensively. For example, UNEP (2000) states that compliance with and enforcement of MEAs 'does not as yet match the speed at which they were developed'. Consequently, there seems to be a consensus that more attention needs to be given to compliance and enforcement. For example, UNEP (2001a) postulates 'an urgent need to strengthen compliance by parties with multilateral environmental agreements'. The so-called Malmö Ministerial Declaration of Environment Ministers declares an "alarming discrepancy between commitment and action" (Bjerke 2001).

**Not all forms of non-compliance
or non-enforcement are strictly undesirable...**

This could create the impression as if strict compliance with and enforcement of all rules of a given MEA is what should be aspired for. Such a conclusion neglects the fact, however, that often rules are set above a level that many of a MEA's parties can comply

with immediately or within the foreseeable future. These high standards often perform the function of setting targets to which parties are supposed to move towards over time. This observation is not just valid for MEAs, but also applies to other international regimes. As Levy, Keohane and Haas (1993, p. 404) observe, regime standards are often set higher than many countries with weak administrative capacity can comply with. This is because high regime standards serve other functions as well, such as generating political concern in 'weak countries' and setting normative goals for them, communicating the intensity of preferences among regime members and legitimating technical aid or outright transfer payments that might otherwise be denounced as bribes or blackmail. Similarly, unqualified focus on compliance issues could result in a call for the avoidance of all vague and ambiguous treaty language. Doing so would neglect the fact, however, that often vague and ambiguous treaty language, which might lead to disputes over whether or not a country is in compliance, is at the same time necessary to make a successful negotiation of a MEA possible in the first instance.

Furthermore, Mitchell (1996, p. 25) points out that compliance is neither a necessary nor a sufficient condition for the effectiveness of a MEA: 'Non-compliance with an ambitious goal may still produce considerable positive behavioural change that may significantly mitigate, if not solve, an environmental problem', whilst 'high compliance levels with rules that merely codify existing behaviour, or rules that reflect political rather than scientific realities, will prove inadequate to achieve the hoped-for environmental improvement.' One needs to warn therefore against too much and unqualified concern about compliance and enforcement. They are important issues, but they cannot be the only ones guiding policy makers.

Non-enforcement and non-compliance exist at the domestic level as well...

It is also important to notice that problems with compliance and enforcement are by far not exclusive to either rules contained in MEAs or developing countries. Jacobson and Brown Weiss (1998, p. 512) come to the conclusion that ‘viewed against the assessment of compliance with national laws and regulations within the United States and with Community regulations and directives within the European Union (...) the record at the international level is comparable or better’.

Nevertheless, non-compliance and non-enforcement can represent a problem for MEAs...

Nevertheless, substantial and unwanted non-compliance with and non-enforcement of MEA rules can lead to activities that are contrary to the rules laid down in MEAs and can cause great harm. UNEP (1999) goes as far as calling them ‘international environmental criminal activities’ and estimates that the total value of these activities are in the order of \$20-40 billion annually, or around 5-10% of the size of the global illegal drugs trade. Box 1 lists areas covered by MEAs where illegal activities occur as a consequence of non-compliance and non-enforcement of MEA rules.

Box 1: Prominent examples of illegal activities as a consequence of non-compliance and non-enforcement of MEA rules

- Illegal trade in endangered species and their products (evasion of CITES).
- Illegal trade in ozone-depleting substances (evasion of Montreal Protocol).

- Illegal movements of hazardous waste (evasion of Basel Convention).
- Illegal whaling (in breach of IWC regulations).
- Illegal fishing (outside quota, or in breach of various regional fisheries agreements).
- Illegal logging and trade in timber.
- Illegal dumping of oil at sea (evasion of Marpol Convention).

It is important to note that this list is not exhaustive and just encompasses the best known examples of activities that breach rules of MEAs.

3. APPROACHES TO STRENGTHEN

COMPLIANCE AND ENFORCEMENT IN MEAS

Three approaches to strengthen compliance
and enforcement: sunshine, carrots and sticks...

There are basically three approaches through which compliance and enforcement can become strengthened. The first one is comprised of what Jacobson and Brown Weiss (1998) call “sunshine methods”: improved monitoring, reporting, on-site inspections and access to information. The second is to use what is known as “sticks” or negative measures: penalties, mostly in the form of trade measures, against those who fail to comply and enforce. Trade measures are defined here as ‘any policy instrument which attaches requirements, conditions or restrictions on imported or exported products or services themselves, or the process of their importation or exportation’ (OECD 1999, p. 11). The third is known as “carrots” or positive measures: financial or other incentives to assist countries in building the administrative capacity for compliance and enforcement.

Sunshine is best regarded
as complementary to the carrots approach...

It is clear that sunshine methods can only provide a very indirect way of strengthening compliance and enforcement. The basic underlying presumption of this approach is that countries pay a lot of attention to their compliance and enforcement reputation and if

only more becomes widely and publicly known about their non-compliance and non-enforcement they will engage in remedial action. However, it is unclear whether the effects of strengthened sunshine methods on the reputation of countries alone would be strong enough to improve substantially compliance and enforcement. Furthermore, in as much as some of the sunshine methods such as improved monitoring and reporting are hampered by managerial incapacity and financial constraints this strategy will be regarded as complementary to the carrots approach in this report.

Developing countries oppose the sticks approach and favour the carrots approach...

Whilst there is very little systematic evidence for this, there is a widespread belief and some more qualitative evidence (Brown Weiss and Jacobson 1998) that developing countries have more problems with compliance and enforcement with MEAs than developed countries.² Developing countries are therefore concerned about the use of sticks. They fear that trade measures will be used (and often abused) to their detriment. As Mitchell (1996, p. 15) states: ‘Powerful states, and they alone, use sanctions to enforce those international rules that suit their immediate interests’. Developing countries welcome carrots on the other hand since they are likely to benefit from financial and other incentives.

This seems to suggest that whether sticks or carrots are used does not really matter from the perspective of compliance and enforcement and that the two approaches merely differ in their distributional impacts, in particular in their effect on developing countries. Such a conclusion would be wrong, however. This is because, as this report will argue,

the lack of compliance and enforcement in many countries, particularly the developing ones, is not caused by a lack of will to comply and enforce. Rather it is caused by a lack of administrative, financial and technical capacity. The use of sticks will therefore only have the effect of punishing the recipient country, but will, in most cases, not improve either compliance or enforcement. Only financial and technological transfer as well as assistance in capacity building can bring about better compliance and enforcement. In other words, this report will argue that more emphasis should be put on carrots and less on sticks in the design of MEAs.³

4. THE STICKS APPROACH (NEGATIVE MEASURES)

Defenders of the sticks approach regard trade measures as effective, politically realistic and ‘relatively acceptable’ (Jenkins 1996, p. 127) means of bringing deviant parties into compliance and enforcement (Charnovitz 1994). The more sophisticated defenders of the sticks approach realise that unilaterally imposed trade measures raise serious sovereignty and international political economy issues and are therefore more in favour of a multilateral decision-making process allowing or even requiring the imposition of trade measures (Jenkins 1996, p. 226).

Trade measures fulfil three functions in MEAs...

To understand the appeal that the sticks approach has to many, it is very important to understand the role trade measures can fulfil in MEAs. There are basically three functions: First, they can be used to deter internal and external free-riding; second, they can mitigate problems with so-called emission leakage; and finally, they can be used to directly further the objectives of a MEA in restricting trade in specified substances or species. We will look at each of these three functions one after the other.

Internal and external free-riding...

Economists have examined the strategic incentives countries face with respect to internal and external free-riding in MEAs and have developed the concepts of self-enforcing and renegotiation-proof agreements.⁴ What does this mean? Many environmental problems are truly international or global. They cannot be tackled by a

single country alone. Hence international cooperation is needed for a solution. But whereas environmental policy can use the enforcing power that sovereign nation-states ideally have within their territory, in general international environmental policy cannot take recourse to a supra-national authority with enforcing powers. The affected countries are confronted with a basic Prisoner's Dilemma, in the following sense: the countries have an interest in, say, reducing emissions or reducing over-harvesting of an exhaustible natural resource and all countries would be better off with international environmental cooperation, but each and every one of them also has an incentive to free-ride on the others' efforts and to enjoy the benefits of abatement or harvest limitations without incurring any costs of emission or harvest reduction. (In the following I will speak of emissions only for expositional ease, but the argument applies to any form of environmental degradation.)

Therefore MEAs normally have to deter *external* free-riding, that is, they have to deter countries that would benefit from emission reduction from not signing up to the agreement and staying outside. Equally, they have to deter *internal* free-riding, that is, they have to deter signatory countries from not complying with the requirements of the agreement. What is important is that the mechanism employed to achieve deterrence has to be self-enforcing in the sense that a recourse to an external enforcement agency is not feasible: No country can be forced to sign an agreement and signatories cannot be forced to comply with the agreement.

Problems with deterring

free-riding in the absence of trade measures...

One of the mechanisms that could potentially achieve such deterrence are trade measures. Before coming to this point, let us first examine, however, what the problems are if trade measures (or a similar mechanism) were unavailable. Then the only variable left to a country is the amount of pollution it emits. Hence, the only mechanism left is to threaten not to undertake any emission reduction in order to deter external free-riding or to decrease emissions by less than required by the agreement in order to punish non-compliant countries and to deter internal free-riding. This threat has to be credible in the sense that it is in the interest of the threatening country (or countries) to actually execute the threat whenever other countries try to free-ride. In other words, a threat cannot be credible if a country is worse off after executing the threat than it would be without execution. Non-credible threats cannot deter because potential free riders will anticipate that they could get away with free-riding without being punished. Moreover, an agreement which establishes such a mechanism to deter free-riding has to be renegotiation-proof. This means that the threat has to be credible also in the sense that the threatening country (or countries) must be better off actually executing the threat than refraining from execution and renegotiating a new agreement with the free-riding country (or countries). Agreements that are not renegotiation-proof cannot deter because potential free riders will anticipate that they could strike another deal after free-riding and could therefore get away without being punished.

What are the consequences of the requirements of self-enforcement and renegotiation-proofness on international environmental cooperation. If trade measures (or a similar

mechanism) are unavailable, then one basic result holds: a self-enforcing and renegotiation-proof agreement will *either* consist of only a small subset of affected countries *or* if many countries are parties to the agreement then the gains from cooperation relative to the non-cooperative equilibrium are very small. In other words, large-scale cooperation will either not take place as only few countries sign the agreement or if it does take place it is virtually irrelevant as the agreed upon cooperation improves only marginally on what would have been achieved by unilateral action in the absence of the agreement. Cooperation is either narrow (instead of wide) or shallow (instead of deep).

This result leads us to pessimistic expectations about a solution to an environmental problem exactly for those problems, for which international cooperation is most needed. To see this, note that for the case where the benefits from emission abatement are high and the costs are low (for example, ozone depleting substances), the basic result that cooperation will either be narrow or, if wide, will not be deep, does not matter much as countries have big incentives to solve the problem unilaterally. The same might even be true if the benefits from abatement are relatively low as long as the costs are low as well. Similarly, for the case where the benefits from abatement are low and the costs are high, the basic result from the economic theory of international environmental cooperation does not matter much as even the full cooperative outcome would not do much about the environmental problem due to high costs. The case where the basic result is really relevant is the one where benefits from abatement are high, but so are costs (for example, greenhouse gas emissions). These are exactly the cases where a

solution to the environmental problem would demand wide and deep cooperation most (Barrett 1991, pp. 14f.).

What is the intuitive reason for this rather pessimistic result? In order to deter free-riding, an agreement must specify that the non free-riding countries increase their emissions relative to an agreement without free-riding in order to punish free-riders for not decreasing their emissions at all (external free-riding) or by not as much as requested by the agreement (internal free-riding). In order to deter, the damage to the potential free-rider caused by the increase in emissions must be greater than the potential benefit from free-riding. The wider and deeper cooperation is, the higher is the benefit from free-riding so that the damage to the potential free-rider must also increase in order to deter free-riding. The problem is, however, that the bigger is the damage to the potential free-rider, the bigger is the damage to the punishing countries themselves as well. This self-inflicted damage due to the emission increase limits the punishment that is available for free-rider deterrence. It must not hurt the punishing countries more than the damage caused by the free-riding. Otherwise it will not be credible as the potential free-rider knows that it is not in the best interest of the punishing countries to execute the punishment.

What is more, there must not exist any incentive for the punishing countries and the free-riders to renegotiate the agreement and strike another deal. For this condition to hold, the punishment must not be very high or else the damage to the free-riding country is big as is its incentive to renegotiate another agreement. Because of these twin reasons the credible punishment available cannot be very substantial which means that

it cannot deter much free-riding. Because external free-riding can be deterred only to a small extent, free-riding is ubiquitous and the number of countries participating in an agreement is small. Alternatively, because internal free-riding can be deterred only to a small extent, then the agreement cannot improve much relative to the non-cooperative equilibrium in order to keep the incentives for non-compliance small, if the number of signatories is large.

Trade measures can deter free-riding...

Let us address the question now how trade measures might overcome the negative effects of the requirements of self-enforcement and renegotiation-proofness on international environmental cooperation. Barrett (1997) shows how linking an international environmental agreement with trade can promote cooperation. Trade measures are a more credible threat to deter free-riding than an increase in emissions because, according to Barrett, trade measures mainly harm the free-rider, whereas the emission increase considerably harms the punisher as well.⁵ Hence, with trade measures free-riding can be deterred more effectively as a more substantial punishment becomes credible, so wider and deeper cooperation can be achieved as a self-enforcing and renegotiation-proof equilibrium.

as well as leakage...

Another problem, which can be addressed by restrictive trade measures is so-called leakage. Leakage describes the phenomenon that a decrease in emissions by the participants to an agreement is counter-acted by an increase of emissions by non-members. Lastly, in some MEAs, restrictions of trade in specified substances or species

is the very objective of the MEA, rather than an instrument to deter free-riding. This is the case, for example, in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as well as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

5. THE CARROTS APPROACH (POSITIVE MEASURES)

Defenders of the carrots approach also believe that their preferred means of bringing countries into compliance and enforcement, namely the provision of assistance, is the more effective one (Gündling 1996). They argue that by far the most important reason for failure of compliance or enforcement is a lack of awareness, education, training and capacity, particularly in developing countries. A good example for this is the CITES, for which a 1993 study found that ‘less than 20% of the Contracting Parties to that Convention had as yet finalized appropriate implementation legislation. This was seen to be due to both a lack of awareness of international requirements and to a paucity of personnel trained in the field of environmental law’ (Navid 1996, p. 817).

The following paragraphs will describe how an ideal version of the carrots approach would look like for MEAs:

The carrots approach in an ideal MEA...

To start with, it is important to note that assistance, particularly with respect to the least developed countries, must start long before a MEA comes into effect. Many countries do not have the necessary financial and administrative resources to participate at all or effectively in the negotiation of MEAs. Special financial funds and training schemes should therefore be made available to these countries. As these funds need to be independent of the specific MEA under negotiation it would be best to allocate such a fund to a UN agency, preferably UNEP.

Initial compliance report...

Upon becoming a member to a MEA every country should state in a report to what extent it is already in compliance with the rules of the MEA. This report must also set out a strategy of steps to be undertaken to bring the country into full compliance. It must indicate which national authorities are responsible for which steps of the strategy and the country needs to name an authority with overall compliance responsibility. Indeed, for every MEA information should be available as to the relevant point of contact within a country for issues arising with respect to compliance and enforcement. This information should be centrally stored and managed, preferably with UNEP.

Assistance for a compliance strategy...

Special funds should be made available by each MEA to assist developing countries in putting the strategy for compliance into practice. Such assistance should encompass amongst other things: Administrative and technical assistance to draft effective laws and regulations, educational, financial and other assistance to hire and train staff for the development, implementation and monitoring of the compliance strategy.

Reporting requirements...

In exchange for extensive assistance facilities, parties to an MEA should in turn have the obligation to submit timely reports on the state of their compliance and enforcement. As these reports commit scarce management capacity, they should focus on the most important aspects and follow a standard format whose very core should be transferable from one MEA to another. Small developing countries who are likely to be

overburdened by extensive reporting requirements for various MEAs should receive comprehensive assistance. The secretariat of an MEA should collect the information and provide the conference of parties as well as the public with an informative review of the results of the reports. It should provide a review of the state of compliance in member countries, similar to the trade policy review undertaken within the auspices of the WTO. It goes without saying that in order to perform these functions the secretariat must be well staffed. Reporting requirements are most effective if they lead to increased awareness within member countries about the obligations under the MEA rules and if they function as an educational and training tool for those required to prepare the reports. Secretariats should help parties to identify cases of non-compliance and non-enforcement and should advise and assist parties on how to comply with the pertinent MEA rules.

Engaging the private sector...

The secretariat should welcome inputs from third parties such as NGOs, businesses and private individuals on the state of compliance in member countries. NGOs, in particular, can be helpful in information dissemination and awareness raising among the wider public. Engaging the private sector and the wider public can lead to the establishing or strengthening of a culture of compliance and enforcement. In case of doubt or for general sporadic verification of the information provided by parties, on site monitoring as well as adequate surveillance and investigative methods such as interviewing of relevant country staff should be allowed.

How to deal with non-compliance and non-enforcement...

As is already common practice in MEAs, the formal decision that a member country is in non-compliance with the MEA rules should not be undertaken by the secretariat to the MEA, but should be left to the conference of the parties based upon information provided by the secretariat supplemented by the input from on-site monitoring and third parties as mentioned above. If a country is in non-compliance, it should be given a warning that it needs to develop a strategy to achieve compliance within a reasonable period of time. This warning should be accompanied with a comprehensive package of assistance to help the non-complying party achieve compliance. Efforts to achieve compliance need to be regularly monitored. Only if the non-complying party acts in bad faith and exhibits unwillingness to comply even in the presence of assistance should it be punished with sanctions such as public announcement (“name and shame”), the deprivation of voting rights and other membership benefits, and, as a means of last resort, trade measures. Again, only the conference of parties, not the secretariat, should have the competence to decide on these measures.

Assistance should be provided multilaterally...

Preferably and contrary to existing practice, assistance should not be provided bilaterally as this leaves much discretion to the donating country. Instead, assistance should be administered centrally through a special committee of the MEA and the level of assistance and the criteria of their allocation should be laid down in the rules governing the MEA. Such committees should have regional subsidiaries, where appropriate, to facilitate decentralised provision of technical, financial, educational and

other capacity building assistance, including regional information clearing houses.⁶ Where there is overlap between assistance programmes, efforts should be bundled together into joint programmes. Importantly, as some of the capacity building is inevitably very general in nature and is not specific to any particular MEA such as the capacity to formulate environmental law and regulations and to train and educate relevant staff, there should be a general fund available, preferably under the auspices of UNEP, that provides general assistance to developing countries in environmental matters.

Technology transfer needs to be facilitated...

To facilitate technology transfer, the provision of information, knowledge and skills to firms on how to acquire and use technology is important. However, as a further step a collective technology rights bank for specific MEAs can be established. Such a bank can help in transferring technology via '(a) negotiating the acquisition and diffusion of patent rights with technology owners on fair terms; (b) accepting patents as donations from both private and public sectors; and (c) initiating licenses, commercial development agreements and use agreements with suitable users in developing countries under conditions negotiated on a case-by-case basis' (UNCTAD 1997, p. 7).

Dispute settlement as a measure of last resort...

Dispute settlement procedures need to be in place in case of conflict between parties about whether or not a certain party is guilty of wilful non-compliance and non-enforcement. Dispute settlement should be understood very broadly here, referring to the full range available from mediation and conciliation to formal judiciary settlement

only as a matter of last resort. As a matter of routine, all MEAs should provide last recourse to dispute settlement by the International Court of Justice, which in July 1993 established a seven member Chamber for Environmental Matters (Sand 1996, p. 75).⁷

6. STICKS OR CARROTS?

We have seen in the chapter on the sticks approach that trade measures can fulfil three functions within MEAs:

1. To deter external free-riding and encourage countries to join the MEA.
2. To deter countries from non-compliance with or non-enforcement of the rules of the MEA (sometimes called internal free-riding).
3. To prevent erosion of the MEA by preventing leakage.

In the following we will merely address trade measures that are imposed for the second function. There are two reasons for this: The first and main reason is that this report focuses on issues of compliance and enforcement. The second reason is that developing countries are much less concerned with and often supportive of the use of trade measures employed for the other two functions. Especially with respect to MEAs that are perceived as equitable in their burden sharing and of truly global interest, developing countries as well want to see external free-riding deterred and leakage prevented and will not necessarily object to the employment of trade measures. What they object to is the employment of trade measures for the second function, since they anticipate that they will be the target of such measures and unjustly so since they believe that non-compliance and non-enforcement is a consequence of lacking capacity rather than wilful violations of MEA rules.

Trade measures do not work well

in deterring non-compliance and non-enforcement...

This perception of developing country representatives is strongly buttressed by the available empirical evidence. Chayes, Chayes and Mitchell (1998), based on an earlier and more detailed enquiry into compliance with treaties in international regulatory regimes, come to the conclusion that it is highly erroneous to believe that most compliance problems are caused by wilful violations. They argue in favour of a view of 'noncompliance as expected rather than deviant, and as inherent rather than deliberate. This in turn leads to deemphasis on enforcement measures or coercive sanctions, whether formal or informal, except in the most egregious cases. It shifts attention to sources of noncompliance that routine international political processes can manage. Thus, improved dispute-resolution procedures address problems of ambiguity; technical and financial assistance can mitigate, if not eliminate, capacity problems; and transparency and review processes increase the likelihood that national policies are brought progressively into line with agreed international standards' (Chayes, Chayes and Mitchell 1998, p. 62).

A joint paper by the Secretariats of UNEP and the World Trade Organization (WTO) argues that 'it is recognized that in most cases, when a State is in non-compliance, this is not because of a wilful violation, but rather because of a lack of ability to comply. Therefore, the best way to address non-compliance is through the provision of assistance, rather than through punitive measures. This is particularly true when addressing compliance issues related to developing countries.' (WTO and UNEP 2001, p. 2).

Kummer (1994, p. 262) also believes that the carrots approach is inherently politically more realistic in MEA negotiations: ‘Due to the absence of punitive elements, measures providing incentives generally stand a higher chance of political acceptance than those providing for sanctions or reprisals. (...) [I]nternational treaty negotiations are rarely hampered by controversies over the necessity of technical and financial assistance, and the aim of supporting developing countries in the fulfilment of their obligations, even though the modalities can be controversial’.

The compatibility of the sticks approach with WTO rules is questionable...

A further, at least potential, problem with the sticks approach lies in the fact that the application of trade measures might violate the rights of countries that are members of the World Trade Organization (WTO). It is beyond the present paper to discuss this issue in detail – see Neumayer (2000, 2001b) for a comprehensive discussion. Box 1 provides a brief overview of the relevant aspects and demonstrates that there is substantial reason to presume that trade measures taken in pursuance of MEA objectives could clash with the rights and obligations of WTO member countries. Incompatibility with WTO rules can render the sticks approach potentially ineffective, which would further buttress the case for using the carrots approach instead. Note that this would apply to all three uses of trade measures mentioned further above.

The compatibility of trade measures taken in pursuance of MEAs with WTO rules has gained fresh importance with the initiation of negotiations aimed at clarifying the

relationship at the WTO Ministerial Conference in Doha in November 2001. At this moment, it is unclear what the outcome of these negotiations will be. However, the formulation used in the Ministerial Declaration seems to suggest that whatever the outcome might be, WTO members will retain the right to challenge trade measures before a dispute panel (negotiations ‘shall not prejudice the WTO rights of any Member that is not a party to the MEA in question’ and ‘shall not add to or diminish the rights and obligations of Members under existing WTO Agreements’).

Box 2: The compatibility of trade measures in MEAs with WTO rules.

No WTO member has ever challenged any trade measure another WTO member had purportedly undertaken in compliance with an MEA. Hence no relevant WTO case law and no binding interpretation exists – as of yet. Nevertheless one can examine whether trade provisions in MEAs appear to clash with WTO rules. The answer is that this can indeed be the case.

Most MEAs with explicitly mandated or allowed for trade measures restrict trade between parties and non-parties or even trade between parties. These restrictions certainly violate the general most favoured nation treatment obligation in the General Agreement on Tariffs and Trade (GATT) Article I. If these restrictions take the form of import or export bans, export certificates or access restrictions rather than duties, taxes or other charges then they might violate the general elimination of quantitative restrictions obligation in GATT Article XI. If countries in alleged pursuance to or compliance with MEAs applied regulations or taxes differently to imported than to

domestically produced goods and services, then they might also violate their national treatment obligation contained in GATT Article III. If they applied product standards or sanitary or phytosanitary measures that affected domestic and foreign producers differently they might violate their obligations under the Technical Barriers to Trade (TBT) Agreement or under the Agreement on Sanitary and Phytosanitary Measures (SPS Agreement). However, the trade provisions contained in MEAs, which appear to violate one or the other GATT obligations, can still be considered WTO consistent if they are covered by the general exceptions of GATT Article XX or similar provisions in one of the other WTO agreements. We will concentrate on GATT Article XX, which reads as follows:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

...

(b) necessary to protect human, animal or plant life or health;

...

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

In the following we will look at the MEAs covered in some detail in this paper, namely the Montreal Protocol, CITES and the Basel Convention and briefly discuss whether trade measures taken in pursuance of these agreements could be justified with recourse to GATT Article XX.

The ozone layer as well as endangered species constitute an exhaustible natural resource in the meaning of Art. XX(g). The article further demands that trade measures 'are made effective in conjunction with restrictions on domestic production or consumption', which is true for the Montreal Protocol and the Basel Convention. However, problems could arise with respect to CITES as its provisions for the regulation of domestic wildlife use contrary to its provisions for the regulation of international wildlife trade are rather rudimentary. Trade measures must also 'relate to' the conservation of an exhaustible natural resource, which has been interpreted by GATT/WTO dispute settlement as 'primarily aimed at' such conservation. All three MEAs should pass this test as their very aim is the conservation of an exhaustible natural resource. However, a problem could arise if a WTO panel interprets the objective of trade measures, especially in the Montreal Protocol, narrowly as merely broadening the participation of countries in deterring free-riding, rather than directly protecting an exhaustible resource. Could these trade measures then still be considered 'primarily aimed at' conservation?

All three MEAs furthermore purport to protect either human, animal or plant life or health in the meaning of Article XX(b). The article requires further that trade measures are 'necessary' for such protection, which has been interpreted by GATT/WTO dispute panel as requiring that 'no alternative measures either consistent or less inconsistent' with WTO rules exist. This requirement could potentially pose an insurmountable hurdle for all three MEAs. Could taxes or transferable emission permits have phased out ODS as effectively and rapidly as the trade restrictions contained in the Montreal Protocol? Could direct harvest and wildlife management regulations prevent extinction of endangered species similarly to the trade restrictions contained in CITES? Are trade

restrictions really necessary to prevent environmental and health damage from transborder shipments of hazardous waste? Even accepting the validity of ‘limited capabilities of the developing countries to manage hazardous wastes and other wastes’ (preamble of Basel Convention), is a complete ban of trade in hazardous waste between OECD- and non-OECD countries really necessary? Are there really no less GATT inconsistent measures for the preservation of biodiversity than restrictions on access to genetic resources? Would less GATT inconsistent measures need to be equally effective as the trade restrictions to be considered alternatives? It would be beyond the scope of this paper to attempt to answer these questions. Suffice it to say here that it is open to debate at least whether the trade measures contained in the three MEAs could pass the ‘necessity’ test of Art. XX(b).

If trade measures in MEAs are covered by one of the exceptions in Art. XX(b) or XX(g), they must still pass the requirements as set by the preamble of the article. This seems to be rather easy with respect to the requirement that these measures are not applied in a manner which would constitute ‘a disguised restriction on international trade’, as the three MEAs are explicit and rather transparent in their provision for trade restrictions. It is more doubtful, but still arguable, that they are ‘not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail’. This clause is usually interpreted by GATT/WTO panels as the requirement to carefully balance the environmental objectives of the trade measures with the trade rights of negatively affected WTO members. As all three MEAs have very widespread multilateral support one can argue that the international community of nation states has given its blessing to the objectives

contained in the MEAs and to the trade measures they employ. Furthermore, the Montreal Protocol, CITES and the Basel Convention do not discriminate against non-parties as such as these can still enjoy all the trade benefits of parties if, in spite of remaining non-parties, they comply with the substantial obligations of the agreement. From this perspective, one could argue that the trade measures in all three MEAs would stand a good chance to pass the preambular test of Art. XX.

So far we have focussed on trade measures between parties and either non-parties or non-complying parties as specifically mandated or explicitly allowed by the MEAs. We have seen that while the potential for WTO inconsistency clearly exists, it is far from clear that these measures actually are WTO inconsistent. Things are different with respect to measures a MEA party might undertake without specific mandate or permission contained in a MEA. Such a country could still argue that while these measures are not specifically mandated or allowed for by a MEA they are nevertheless undertaken in pursuance and compliance of mandated MEA obligations. Whether these would pass scrutiny for WTO consistency is much less clear and cannot be answered in general as the answer very much depends on the concrete measure undertaken and the manner in which it was applied.

That countries like to invoke MEAs in justification for at times clearly protectionist measures can be seen by two cases: ‘United States – Prohibition of imports of tuna and tuna products from Canada’, justified, inter alia, as furthering the objectives of the Inter-American Tropical Tuna Commission and the International Convention for the Conservation of Atlantic Tunas (GATT 1983); and ‘Canada – Measures affecting

exports of unprocessed herring and salmon’, whereby Canada in its submissions referred to international agreements on fisheries and the Convention of the Law of the Sea (GATT 1987).

The carrots approach has
some problems as well, however...

Whilst the arguments presented so far make a strong case for the use of the carrots approach, it is also not without problems. Kummer, for example, neglects the fact that provisions for substantial assistance that go beyond mere rhetoric or minimalist financial commitments are very rare in international treaty making in general as well as with respect to the environment. As Mitchell (1996, p. 14) points out ‘governments prove reluctant to pay not only their own compliance costs, but those of other governments who are obligated under the treaty to comply in any event’, noting that assistance faces the problem of raising the necessary funds, which poses a collective action problem within the group of donors.

such as limited funds...

In principle, there is no objective that the carrots approach could not achieve equally well as the sticks approach. But, as Charnovitz (1994, p. 7) points out ‘there is a practical limit to the use of carrots because they require the commitment of domestic resources. A carrot given away cannot be enjoyed at home’. Furthermore, defenders of the sticks approach argue that the carrots approach leads to moral hazard problems in that the countries potentially receiving the carrots have an incentive to overstate their

need for assistance: ‘The problem with carrots is that the appetite for them can be insatiable. If all countries knew that sticks are verboten, then obtaining and maintaining an agreement may require an increasing amount of carrots’ (Charnovitz 1994, p. 19), which might destabilize the MEA.

“New and additional finance” is a vague promise...

Another problem of the carrots approach is that the promise of ‘new and additional finance’ to meet all the ‘incremental costs’ by developing country parties that was the formulation used in the treaties of the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro is a very vague one (Jordan and Werksman 1996). New and additional finance begs the question: in addition to what? In addition to existing levels of aid or the 0.7% of GNP benchmark set by the United Nations, but not adhered to by the vast majority of developed countries? In addition to total existing resource flows including private investment flows? Or simply in addition to existing *environmental* assistance flows? Not surprisingly, with such ambiguity built into the very terms, developed countries could on the whole get away without making specific substantial commitments, with the possible exceptions of the Montreal Protocol Multilateral Fund and the Global Environment Facility (GEF), which together represent a rather limited financial commitment, however.

And what are “incremental costs”?...

Similarly vague and ambiguous is the term ‘incremental costs’. Certainly, the donors of assistance have an incentive to argue that few costs are incremental, whereas the recipient countries have the opposite incentive. Are ‘gross’ or ‘net’ incremental costs

relevant? Jordan and Werksman (1996, p. 253) define gross incremental costs as ‘the difference between the total costs of implementing a proposed project and that course of action which the developing country would have pursued had it not undertaken commitments under the Convention’. Net incremental costs, on the other hand, can be defined as ‘the additional cost of complying with the Convention *minus* the value of any domestic benefits thereby generated’. The gross incremental cost interpretation ensures that developing recipient countries are better off after receiving the finance, whereas the net incremental cost interpretation leaves them indifferent between the “no finance, no project” and the “finance and project” situation. It does not come as great surprise that the developing countries favour the gross incremental costs approach, whereas the developed countries as well as the institutions within their political control such as the GEF generally favour the net incremental approach.

7. THE CARROTS AND STICKS

APPROACHES IN THE REALITY OF MEAS

Some form of carrots
are common practice in practically all MEAs...

To some extent at least some form of carrots are common practice in almost all MEAs. As Kummer (1994, p. 259) observes: 'Practically all modern environmental treaty systems provide for extensive obligations of mutual assistance in technical fields, cooperation in research, monitoring of the state of the environment, and elaboration of action plans, as well as exchange of information'. Sometimes the secretariats of MEAs are charged with providing assistance to the member countries. For example, the Basel Convention Secretariat provides assistance in identifying and dealing with cases of illegal traffic in hazardous wastes. CITES and UNEP's Regional Seas Programme organise training seminars and help in the solution of technical problems. Some MEAs such as the Climate Convention, the Montreal Protocol and the Biodiversity Convention have even established specialised advisory bodies to help parties to establish, process and monitor relevant information flows (Kummer 1994, p. 260). In general, MEAs give preference to flexible, cooperative, consensus-building mechanisms instead of more formal methods of dispute settlement (WTO and UNEP 2001, p. 4).

As concerns a comprehensive database of contact points for compliance and enforcement, efforts in this respect have already been undertaken and a preliminary

worldwide list has already been established (UNEP 2001c). However, it is still incomplete and needs to be extended and regularly updated.

Some general assistance

provisions are not confined to specific MEAs...

In addition to such assistance facilities at the level of each individual MEA, there is also a number of more general activity ongoing under the auspices of UNEP. This agency provides technical assistance to countries 'through the development of national laws and relevant institution-building mechanisms to implement specific agreements and related training programmes' to build capacity in developing countries (UNEP 2000). Countries, which have received such assistance, include Antigua and Barbuda, Brunei Darussalam, Chad, Cuba, Ghana, Mauritania, Myanmar, the Niger, Nigeria, Oman and Peru. UNEP has also held a regional workshop on environmental compliance and enforcement in Bangkok, Thailand, and has planned more for other regions. UNEP has also facilitated and coordinated the development of a regional CITES enforcement treaty in Africa (the so-called Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora). This treaty establishes bodies responsible for enforcement at three institutional levels: 'a Task Force of seconded law enforcement officers from each Party capable of operating internationally against illegal trade in wild fauna and flora; a National Bureau designated by each Party to guide and receive information from the Task Force on illegal trade; and a decision-making body called the Governing Council of the Parties which sets policy and reviews actions and to which the Task Force Director is accountable' (UNEP 2000). UNEP is also assisting 27 countries in preparing their National Biodiversity Strategy and Action

Plans and national reports to the conference of parties of the Convention on Biological Diversity (UNEP website).

In comparison, trade measures
play a relatively minor role in the majority of MEAs...

In comparison and maybe somewhat surprisingly trade measures do not play any role in the vast majority of MEAs. A 1994 survey revealed that while many of the then 180 international treaties and other agreements on environmental matters contained trade-related aspects, only 18 actually employed trade measures (WTO 1994).

But quite an important role in the major MEAs...

However, in three of the most important MEAs, which we will look at now, trade measures play a prominent role alongside assistance provisions and those measures are bound to play a major role in future amendments to the Kyoto Protocol for the reduction of greenhouse gas emissions. Also, the number of MEAs containing trade measures has certainly increased since the WTO (1994) study was undertaken with the conclusion of such agreements as the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention), the Cartagena Protocol on Biosafety and the Stockholm Convention on Persistent Organic Pollutants (POPs Agreement). Box 3 provides some background information on the three MEAs under focus in this study.

Box 3: The three MEAs under focus in this study

The Montreal Protocol

The Montreal Protocol on Substances that Deplete the Ozone Layer, concluded in September 1987, was the first major breakthrough in multilateral efforts trying to tackle the problem of thinning of the stratospheric ozone layer. It has 183 parties as of January 2002. The Vienna Convention for the Protection of the Ozone Layer, concluded in 1985, had no binding obligations included. The Montreal Protocol aims to phase out ozone depleting substances (ODS): substances responsible for the thinning of the ozone layer in the stratosphere, which filters out ultraviolet radiation. The major ODS covered by the Protocol – so-called controlled substances – are chlorofluorocarbons (CFCs) and Halons. Whilst developed countries faced binding emissions reductions from the start, developing countries were given a grace period over which they were allowed to increase their emissions. This period is now over and developing countries are also obliged to phase out ODS. Several amendments and additions have developed the Protocol further.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

CITES is one of the oldest MEAs. It is sometimes also known as the Washington Convention. Adopted in March 1973 and entered into force in 1975, it currently has 154 parties as of January 2002. Its major goal is to monitor and regulate international trade in endangered species of wild fauna and flora and to ultimately stop all illegal trade in

such species. It practically bans all trade in about 900 species and severely regulates trade in about another 29000 species.

The Basel Convention

The Basel Convention was adopted in 1989 and entered into force three years later. It has 149 parties as of January 2002. Prominent instances of transboundary movements of hazardous waste, particularly into developing countries had prompted negotiators to address questions regarding the management, disposal and transboundary movement of the 400 million or so tonnes of hazardous waste produced every year. Its major objectives are the reduction of hazardous waste production, an encouragement of treatment and disposal of such waste close to the sources of production and a minimisation of transboundary movements in hazardous waste. An amendment to the Convention practically prohibits all shipments of hazardous waste from developed to developing countries.

7.1 The Montreal Protocol

Its trade provisions...

The Montreal Protocol's major trade provisions are contained in its Art. 4. It bans imports (Art. 4.1) and exports (Art. 4.2) of controlled substances between parties and non-parties of the Protocol, unless non-parties can demonstrate that in spite of not being formally a party to the Protocol they nevertheless comply with its obligations (Art. 4.8). Art. 4.3 also bans the import of products containing controlled substances from non-parties. In principle, Art. 4.4 of the Protocol even provides the possibility to ban or restrict the import from non-parties of products made with, but not containing,

controlled substances. However, such restrictions were soon be deemed infeasible by the parties to the Protocol. These provisions were therefore never made operational and it must be regarded as highly unlikely that they would ever become operationalised.

Its non-compliance problems...

Four important non-compliance issues that the Montreal Protocol faces are (Brown Weiss 1998, p 152f.):

- failure to report or to report fully on a timely basis;
- failure to meet targets and timetables for controlled chemicals (in Russia and several central and east European countries);
- smuggling of CFCs into Western countries;
- anticipated compliance problems by several developing countries in meeting targets and timetables when their period of grace expires.

The most important non-compliance problem is illegal trade in ODS. To contain this problem, the Montreal Amendment to the Montreal Protocol, which at the time of writing had been ratified by 37 nations and entered into force in November 1999, introduces a mandatory licensing system for the import and export of ODS from 2000 onwards with developing countries enjoying the possibility to delay introduction of such a licensing system for methyl bromide and hydrochlorofluorocarbons (HCFCs) until 2002 and 2005, respectively.

Its generous assistance provisions...

In spite of all its trade provisions, the Montreal Protocol comes closest to the ideal model of the carrots approach as set out in section 5 of this report. Parties are required to submit regular reports, which are reviewed and consolidated by the Secretariat. In 1990 an Implementation Committee was created for the Montreal Protocol that deals with compliance issues. It consists of ten Parties elected for a two-year period. It hears any complaint brought to it by any Party to the Protocol or the Secretariat. While it cannot take decisions, its role is to determine the facts and possible causes of non-compliance and to make recommendations to the Meeting of Parties with respect to the measures for bringing the relevant Party back into compliance. These mechanisms include technical and financial assistance, the issuing of warnings as well as the suspension of specific rights and privileges under the Protocol (WTO and UNEP 2001).

The financial and technical assistance provided through the Montreal Protocol has been hailed by the OECD (1997a, p. 15) as an ‘outstanding example of integrating financial and technical assistance into an international environmental protection regime’. After the Conference of Parties agreed to create a fund for developing countries to meet their “agreed incremental costs” in 1990 in London, the so-called Multilateral Fund became formally established in December 1992. Areas eligible for funded assistance include, inter alia, the preparation of developing country programmes to identify their special assistance needs, facilitation of technical cooperation, dissemination of information and training and the financing of investment projects. More than US\$ 1.25 billion have been made available to finance the fund.⁸ In addition, the GEF has provided another US\$ 160 million.

In case of disputes between Parties, the Montreal Protocol requests Parties to seek solution by negotiation or mediation first before bringing the dispute to arbitration within the auspices of the Protocol or before the ICJ.

At the 13th Meeting of the Parties in October 2001 in Colombo, Sri Lanka, compliance by developing countries with their ODS control obligations was reviewed. With the help of generous financial and technical assistance, the vast majority of developing countries managed to comply with their obligations. Only about 20 countries are actually or potentially in non-compliance. Those in actual non-compliance were explicitly named in the final decisions of the implementation committee. They were encouraged to get back into compliance for which they could existing assistance provisions, but also warned that further measures would be considered against them should they fail to return to compliance.

7.2 The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Its trade provisions...

CITES is not a MEA with trade amongst many other provisions. Rather, its very aim is to restrict international trade in endangered species. CITES' major trade provisions are as follows: Appendix I contains species (around 600 animals and 300 plant species), which are threatened with extinction and whose trade for commercial purposes is generally prohibited with few exceptions (Art. III). Appendix II contains a further 4000 animals and 25,000 plants species, which might become threatened with extinction if

their trade was not regulated. Their export is only allowed if the exporter has acquired an export permit from the state of export, testifying that the export will not be detrimental to the survival of that species, that the specimen were not obtained in contravention of protection laws of the exporting state and that any living specimen will be so prepared for transport that risk of injury, damage to health or cruel treatment is minimised (Art. IV). Similar to the Montreal Protocol, trade in appendix II and, in rare circumstances, even in appendix I species is possible with non-parties if these countries can demonstrate that they fully comply with the convention (Art. X). If a party fails to comply with the convention obligations it can lose its right to be treated as a party and can essentially be treated as a non-party.

Experts' assessments on the effectiveness of CITES are mixed (OECD 1999, p. 22). Crocodylians and elephants are the cases where CITES might have significantly helped to improve their conservation. It has been less effective with respect to, for example, rhino and tiger species and has been indifferent with respect to the conservation status of some other species (ibid). Martin (2000, p. 30) comes to the rather sobering conclusion that 'if the convention is benefiting species then, even after careful study, it has not been demonstrated'. One shortcoming is that CITES is unbalanced in regarding international trade in wildlife all too often as a threat to preservation rather than as a means to raise the preservation value of endangered species if properly regulated. Complete trade bans often merely raise the value of illegal trafficking and render stringent controls more difficult.

Its reporting requirements...

Parties to CITES are required to submit regular reports on their implementation of the convention. Both the Secretariat and the Animals and Plant Committee review and monitor compliance. A NGO network called TRAFFIC (Trade Records Analysis of Flora and Fauna in Commerce) provides valuable information input. A Standing Committee, with Parties from each of the six geographic regions, deals with non-compliance issues. Similar to the Montreal Protocol, this Standing Committee as well as the Secretariat only make recommendations and leave decisions to the Conference of Parties. In case of non-compliance a warning is issued. If the relevant Party fails to enact regulations that bring it into compliance a recommendation by the Conference of Parties to suspend trade in relevant species will be the consequence (WTO and UNEP 2001).

Its limited assistance provisions...

Parties in compliance difficulties can obtain assistance from the Secretariat to help it achieve compliance. Furthermore, the Secretariat provides enforcement seminars, customs training packages and assists in the creation and translation of identification manuals (OECD 1997b). However and importantly, there is no such generous funding available as is the case with the Montreal Protocol.

7.3 The Basel Convention

Similar to CITES, restrictions of trade are at the heart of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. It aims to 'ensure that the management of hazardous wastes and other wastes including their

transboundary movement and disposal is consistent with the protection of human health and the environment whatever the place of disposal' (preamble).

Its trade provisions...

Its major trade provisions are as follows: Trade in hazardous waste is subjected to a comprehensive control system, which is based on the principle of prior informed consent (PIC). This means that a country can only export these materials to another country if it has gained the prior written consent from the importing country and all transit countries (Art. 6). Trade in these materials with non-parties is prohibited (Art. 4:5) unless agreements with these non-parties have been concluded, which 'do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention' (Art. 11:1). A party has the right to ban the entry or disposal of foreign hazardous waste in its territory (Art. 4:1). Furthermore, an amendment to the Convention generally bans trade in these materials between so-called Annex VII (OECD-countries) and non-Annex VII countries. However, at the time of writing, this amendment had only been ratified by 20 countries and it is unclear whether it will reach the necessary ratifications to enter into force (cf. Krueger 1999, pp. 106-108).

Its reporting requirements

and limited assistance provisions...

Parties to the Basel Convention are still working on the development of a procedure dealing with compliance issues. As with the other two MEAs looked at here, Parties are required to submit an annual report to the Secretariat. Parties may also notify the

Secretariat if they suspect any other Party of non-compliance with or non-enforcement of the rules of the Convention. The Secretariat maintains an international reporting system for cases of illegal trade in hazardous waste. It is also supposed to provide advice and assistance to the Parties. However, similar to CITES and contrary to the Montreal Protocol, there is no generous funding for assisting developing countries in their efforts to comply with the Convention. An UNCTAD (1997, p. 5) paper notes the ‘potential huge gap between resource requirements and their availability’ for the creation of centres on training and technology transfer.

7.4 Carrots or sticks: which approach has been more effective?

The natural question is whether the carrots or the sticks approach has been more effective with respect to the three MEAs looked at here. Certainly, as concerns deterrence of external free-riding, trade measures have played an important role. Even then, however, carrots have also been important. For example, with respect to the Montreal Protocol, it is next to impossible to separate the effects of the threat of trade measures (sticks) from the effects that the promise of financial assistance for developing countries (carrots) contained in Art. 10 of the Protocol had on encouraging participation from the developing world.

Generous assistance has been
decisive for the success of the Montreal Protocol...

As concerns compliance itself, however, there can be little doubt that the generous assistance provided by the Protocol has helped enormously in keeping non-compliance at a minimum. The financial funds made available for developing countries through the

Multilateral Fund are commonly hailed as the prime example of an effective and successful application of the carrots approach. Many countries, such as Cameroon and China received financial assistance to develop a national strategy for the phasing out of ozone-depleting substances as required by the Protocol (Jacobson and Brown Weiss 1998, p. 526).

As one observer has noted with respect to the importance of the carrots approach for the success of the Montreal Protocol: ‘There was a strong feeling that if Parties felt they were being subjected to some kind of judicial process they would become defensive and turn in on themselves, with the result the ozone layer would be the loser. With a more constructive approach based on a recognition that non-compliance is frequently the consequence (...) of technical, administrative or economic problems, a regime that worked with, rather than against Parties in difficulty was sought’ (Patrick Szell, cited in OECD 1997a, p. 27).

Some of the problems of CITES can be traced
back to its lack of generous assistance provisions...

Unlike the Montreal Protocol, CITES does not contain substantial financial assistance to help developing countries comply with the convention, which has been regarded as one of the major reasons for poor implementation of species trade control systems in these countries and consequently substantial illegal poaching and trafficking (OECD 1999, p26). This failure to address the ‘lack of institutional capacity in many developing countries to administer a complex agreement’ (OECD 1997b, p. 39) is the more lamentable given that ‘the striking contrast between the limited number of facilities that

produced ozone-depleting substances and the millions of individuals who could engage in illicit trade in endangered species helps to explain why CITES was much more difficult to enforce than the Montreal Protocol' and would have warranted a much stronger carrots approach (Jacobson and Brown Weiss 1998, p. 521).

The same is true for the Basel Convention...

Similar to CITES, the Basel Convention does not contain any substantial provisions for financial assistance to developing countries to assist them in implementing their obligations. This has been regarded as one of the major reasons for poor implementation of hazardous waste trade control systems in these countries and consequently substantial illegal trading, which will become exacerbated once the amendment to the Convention banning trade between OECD- and non-OECD-countries comes into force (OECD 1999, pp. 27f).

8. CONCLUSION

This report has argued that problems with compliance and enforcement in developing countries are likely to stem from insufficient capacity rather than wilful violations of MEA rules. As a consequence, the carrots approach is much more appropriate to deal with compliance and enforcement problems in MEAs than the sticks approach. To the least, it can be said that strong provisions for assistance in capacity building should accompany any trade measures in MEAs. Trade measures have gained immense prominence in theoretical analyses of how to prevent non-compliance and non-enforcement, but the reality of MEAs is not captured in these models that do not and cannot adequately model the capacity problems in developing countries that are the real cause for non-compliance and non-enforcement.

Whilst almost all MEAs have provisions for some assistance in capacity building and surprisingly few MEAs contain trade measures, the level of assistance is often minimal. CITES and the Basel Convention are good examples of MEAs for which the everything but generous level of assistance contributes significantly to problems with compliance and enforcement. The Montreal Protocol, on the other hand, provides for rather generous assistance, comes closest to the ideal model of the carrots approach set out in this report and not surprisingly is widely held as the prime example of an ambitious and yet successful MEA.

The main lesson to be learnt from this report is that if tackling problems with compliance and enforcement are taken seriously, then developed countries must be willing to step up significantly the assistance for administrative, financial and technical capacity building in developing countries for achieving the goals of the MEA under negotiation. Developing countries should insist on provisions similar to the ones contained in the Montreal Protocol in negotiating new agreements and should try to convince their developed country counterparts that assistance in existing MEAs needs to be extended.

Whilst this recommendation is perhaps politically not very realistic given the very limited willingness of developed countries to provide generous assistance, there will often be no other way if one is serious about tackling non-compliance and non-enforcement. Developing country representatives are frustrated about the fact that whilst developing countries were willing to sign up to many MEAs that address environmental concerns in developed countries after the UNCED in Rio de Janeiro in 1992, the developed countries never really provided their part of the bargain and did not step up assistance as hoped for by developing countries. Non-compliance with MEA rules in developing countries can therefore be understood to some extent as a consequence of the non-compliance of developed countries with their commitment to provide adequate assistance to developing countries. Given this context, it would not only, as argued above, be highly ineffective to apply the sticks approach rather than the carrots approach, but it would also be highly unfair to developing countries and their development needs.

9. POLICY RECOMMENDATIONS

The following policy recommendations follow from the report:

- The sticks approach employing trade measures is not suitable for tackling non-compliance and non-enforcement in MEAs. It does not address the root causes of non-compliance and non-enforcement.
- Increased use of trade measures could also clash with WTO rules.
- At the Doha Ministerial Conference in November 2001, WTO members have decided to initiate negotiations concerning the compatibility of trade measures contained in MEAs and WTO rules. WTO members should take into account the unsuitability of trade measures for tackling non-compliance and non-enforcement in MEAs in their negotiations.
- Generous assistance provisions (the carrots approach) address the root cause of non-compliance and non-enforcement, which is limited financial and managerial capacity.
- The Montreal Protocol is the most successful MEA so far precisely because of its generous assistance provisions.

- If policy makers and treaty negotiators want to seriously tackle non-compliance and non-enforcement, then they have to give generous assistance provisions a much more prominent role in MEAs.
- Compliance and enforcement of MEA obligations by developing countries is only possible if developed countries comply with their obligations to provide assistance.
- Compliance and enforcement do not come cheaply, but without generous assistance the call for greater compliance and enforcement is merely cheap talk.
- Developing country negotiators should insist in amendments to existing MEAs or in negotiations for new MEAs that generous assistance provisions are considered an integral part of the agreement.

ENDNOTES

- 1 The term “developing countries” refers here to all countries other than the 15 European Union member countries, Norway, Iceland, Switzerland, Australia, New Zealand, Canada, Japan and the US.
- 2 Note, however, that developed countries might have less problems with compliance and enforcement because MEA rules might be set in a way that conforms with existing practice in those countries or requires things that developed countries would have wanted to undertake in any case. In other words, given that developed countries are often leading in environmental affairs the rules laid down in MEAs might require only little, if any, change from developed countries in order to achieve compliance. It might therefore not come as great surprise that they will find it much easier to comply.
- 3 Even in the case where non-compliance and non-enforcement is caused by a lack of will one needs to be careful in condemning the country. Non-compliance or non-enforcement due to lack of will is objectionable if the country is truly free-riding on other countries’ efforts. This would be the case if the country is better off with the MEA, but is even better off if all other countries comply, but the country itself does not and free-rides on other countries’ efforts. If, however, the MEA is unbalanced in the sense that a country does worse with the MEA than it does without it then wilful non-compliance might be more difficult to condemn. After all, most would agree that a MEA should represent a Pareto improvement, i.e. should make all countries better off without making any one worse off. If this is not the case, then non-compliance or

non-enforcement might be a way for a country to avoid being worse off if it had been bullied into an unbalanced MEA or has signed up to it without realising that it will be worse off.

- 4 The major contributions are have been made by Steve Charnovitz, Scott Barrett, Carlo Carraro, Domenico Siniscalco, Alfred Endres, Michael Finus and Bianca Rundshagen (see Neumayer 2001a).
- 5 A necessary condition is, however, that the trade measures are executed by a certain minimum number of countries and not just by one country alone (Barrett 1997, p. 347). Indeed, cooperating countries that fail to execute trade measures against free-riders might themselves face trade measures.
- 6 An existing example of the latter is the Ozone Action Clearing House.
- 7 At the time of writing, the ICJ never had to deal with a truly environmental international dispute.
- 8 The 13th Meeting of the Parties decided to evaluate and review the performance of the financial mechanism via an external, independent study by 2004.

REFERENCES

- Barrett, Scott (1991): '*Economic analysis of international environmental agreements: lessons for a global warming treaty*'; in: OECD (ed.): *Responding to climate change: selected economic issues*, Paris: Organisation for Economic Co-operation and Development, pp. 109-149.
- Barrett, Scott (1997): The strategy of trade sanctions in international environmental agreements, *Resource and Energy Economics* 19 (4), pp. 345-361.
- Bjerke, Siri (2001): *Enforcement and compliance of Multilateral Environmental Agreements*, Speaking notes, Ministry of Environment Norway.
- Brown Weiss, Edith (1998): '*The five international treaties: a living history*', in: Brown Weiss and Jacobson (1998), pp. 89-172
- Brown Weiss, Edith and Harold K. Jacobson (eds.) (1998): *Engaging countries – strengthening compliance with international environmental accords*, Cambridge (Mass.): MIT Press.
- Cameron, James, Jacob Werksman and Peter Roderick (eds.) (1996): *Improving compliance with international environmental law*, London: Earthscan.
- Charnovitz, Steve (1994): Encouraging environmental cooperation through the Pelly Amendment, *Journal of Environment & Development* 3 (1), pp. 3-28.
- Charnovitz, Steve (1996): Trade measures and the design of international regimes, *Journal of Environment & Development* 5 (2), pp. 168-196.

- Chayes, Abram and Antonia H. Chayes (1995): *The new sovereignty: compliance with treaties in international regulatory regimes*. Cambridge (Mass.): Harvard University Press.
- Chayes, Abram, Antonia Handler Chayes and Ronald B. Mitchell (1998): 'Managing compliance: a comparative perspective'; in: Brown Weiss and Jacobson (1998), pp. 39-62.
- GATT (1983): *United States – prohibition of imports of tuna and tuna products from Canada*, Panel report, adopted on 22 February 1982, L/5198, BISD 29, Geneva: World Trade Organization.
- GATT (1987): *Canada – measures affecting exports of unprocessed herring and salmon*, Panel report, adopted on 22 March 1988, BISD 35S/98, Geneva: World Trade Organization.
- Gündling, Lothar (1996): Compliance assistance in international environmental law: capacity-building through financial and technology transfer, *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht*, pp. 796-809.
- Jacobson, Harold K. and Edith Brown Weiss (1998): 'Assessing the record and designing strategies to engage countries'; in: Brown Weiss and Jacobson (1998), pp. 511-544.
- Jenkins, Leesteffy (1996): 'Trade sanctions: effective enforcement tools'; in: Cameron, Werksman and Roderick (1996), pp. 221-228.
- Jordan, Andrew and Jacob Werksman (1996): 'Financing global environmental protection'; in: Cameron, Werksman and Roderick (1996), pp. 247-255.
- Krueger, Jonathan (1999): *International trade and the Basel Convention*, London: Earthscan.

- Kummer, Katharina (1994): Providing incentives to comply with Multilateral Environmental Agreements: an alternative to sanctions?, *European Environmental Law Review*, October, pp. 256-263.
- Levy, Marc A., Robert O. Keohane and Peter M. Haas (1993): 'Improving the effectiveness of international environmental institutions'; in: Peter M. Haas, Robert O. Keohane and Marc A. Levy (eds.): *Institutions for the earth: sources of effective international environmental protection*, Cambridge (Mass.): MIT Press, pp. 397-416.
- Martin, R. B. (2000): 'When CITES works and when it does not'; in: Jon Hutton and Barnabas Dickson (eds.): *Endangered species, threatened convention: the past, present and future of CITES*, London: Earthscan, pp. 29-37.
- Mitchell, Ronald B. (1996): 'Compliance theory: an overview'; in: Cameron, Werksman and Roderick (1996), pp. 3-28.
- Navid, Daniel (1996): Compliance assistance in international environmental law: capacity-building, transfer of finance and technology, *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht*, pp. 810-819.
- Neumayer, Eric (2000): Trade measures in multilateral environmental agreements and WTO rules: potential for conflict, scope for reconciliation', *Aussenwirtschaft*, 55 (3), pp. 403-426.
- Neumayer, Eric (2001a): How regime theory and the economic theory of international environmental cooperation can learn from each other, *Global Environmental Politics* 1 (1), pp. 122-147.
- Neumayer, Eric (2001b): *Greening trade and investment: environmental protection without protectionism*, London: Earthscan.

- OECD (1997a): *Experience with the use of trade measures in the Montreal Protocol on Substances that Deplete the Ozone Layer*, Paris: Organisation for Economic Co-operation and Development.
- OECD (1997b): *Experience with the use of trade measures in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*, Paris: Organisation for Economic Co-operation and Development.
- OECD (1998): *Trade measures in the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal*, Paris: Organisation for Economic Co-operation and Development.
- OECD (1999): *Trade measures in Multilateral Environmental Agreements: synthesis report of three case studies*, Paris: Organisation for Economic Co-operation and Development.
- Sands, Philippe (1996): 'Compliance with international environmental obligations: existing international legal arrangements'; in: Cameron, Werksman and Roderick (1996), pp. 48-81.
- UNCTAD (1997): *Positive measures to promote sustainable development, particularly in meeting the objectives of Multilateral Environmental Agreements*. Geneva: United Nations Conference on Trade and Development.
- UNEP (1999): *Report of the Working Group of Experts on Compliance and Enforcement of Environmental Conventions – preparatory session*, Nairobi: United Nations Environment Programme.
- UNEP (2000): *The role of UNEP in the development of guidelines on compliance and enforcement of Multilateral Environmental Agreements – Note by the secretariat*, Nairobi: United Nations Environment Programme.

UNEP (2001a): *Draft guidelines on options for enhancing compliance with Multilateral Environmental Agreements*, Nairobi: United Nations Environment Programme.

UNEP (2001b): *Draft guidelines for effective national environmental enforcement, international cooperation, and coordination in combating violations of Multilateral Environmental Agreements*, Nairobi: United Nations Environment Programme.

UNEP (2001c): *List of Enforcement Contacts*, Nairobi: United Nations Environment Programme.

WTO (1994): *Trade measures for environmental purposes taken pursuant to Multilateral Environmental Agreements: recent developments*, Geneva: World Trade Organization.

WTO and UNEP (2001): *Compliance and dispute settlement provisions in the WTO and in Multilateral Environmental Agreements*, Geneva and Nairobi: World Trade Organization and United Nations Environment Programme.

This document was created with Win2PDF available at <http://www.daneprairie.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.