Chapter 25

The Cartagena Protocol on Biosafety: History, Content and Implementation from a Developing Country Perspective

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1. Introduction

The negotiations of the Cartagena Protocol on Biosafety were finalized on 29 January 2000 in Montreal, Canada. The Protocol came into force on 11 September 2003 (CBD Handbook 2005). A history of the Cartagena Protocol by a professional historian who was not involved in the negotiation process and could thus be expected to have objectively evaluated the roles played by the various protagonists has not been written. Given the short time since the negotiations were finalized and the Protocol came into force, such an objective history could not as yet have been expected. Time will show, in fact, if expecting a history of the Protocol is presumptuous.
Thus, the history I recall here necessarily reflects my own notes and unpublished reports as one of the main negotiators of the Protocol, though I have tried to resort to the documents produced by the various protagonists to help me become as objective as I can. Even thus, both because I know the issues intimately, and because I believe that developing countries carried a heavier load owing to their position of greater disadvantage, I will give more attention to the negotiations of the developing countries. Their load is heavier because of both their obvious limitation in well-trained human resources, and because of the greater complexity of their biodiversity, which increases the risks of gene introgression and thus complicates biosafety considerations. It is also more than likely that history from the perspective of developed countries is going to be well preserved and presented by their better endowed professionals and institutions.

The Biosafety Protocol is complex both because of the nature of regulating genetic engineering, and because of the compromises that had to be reached in order to accommodate a wide range of beliefs (ideologies) on the sanctity of, and acceptability of human-made modifications to, life. This complex situation was exacerbated by the wide range of perceived positions of advantage and disadvantage of human societies.

It is just over three years since the Protocol came into force. Therefore, its implementation is only just beginning. In any event, the implementation of the Protocol will remain difficult as long as the country that is the most active in genetic engineering, the United States of America, remains a non-Party. It should also be noted that, like all environmental agreements, the Cartagena Protocol on Biosafety lacks an enforcement mechanism comparable in power and influence to the Dispute Settlement Body of the World Trade Organization, let alone to the Security Council of the United Nations.

2. A Brief History of the Cartagena Protocol on Biosafety

The Cartagena Protocol on Biosafety is an international law that emanated from the Convention on Biological Diversity. Therefore, its history starts with that of the Convention.

2.1. The Convention on Biological Diversity
A brief history of the negotiations that gave us the Convention on Biological Diversity is given in the Nairobi Final Act of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity (UNEP 1992).

The United Nations Environment Programme (UNEP) Governing Council decided in 1987 to establish the Ad Hoc Working Group of Experts on Biological Diversity. This Group of Experts held three meetings between 1988 and 1990, and produced a final report.

On 25 May 1989, the UNEP Governing Council established the Ad Hoc Working Group of Legal and Technical Experts to negotiate an international law 'for the conservation and rational use of biological diversity'. In May 1991, the Ad Hoc Working Group became the Intergovernmental Negotiating Committee (INC) for a Convention on Biological Diversity.
The INC held a total of seven negotiation sessions from 1990 to 1992. It was transformed into a Conference to adopt the final text of the Convention on Biological Diversity on 22 May 1992. The Conference also adopted 4 resolutions and registered 14 declarations by States or groups of States.

Resolution 2, in Paragraph 2 (c), asks the UNEP Governing Council to 'consider requesting the Executive Director of the Programme [UNEP] to convene an Intergovernmental Committee on the Convention on Biological Diversity starting in 1993 to consider... the need for and modalities of a' biosafety protocol. This was intended to start the implementation of Article 19.3 of the Convention (the clause that requests Parties to consider such a need) before it came into force.

2.2. Report of Panel IV
To prepare for the implementation of Paragraph 2 (c), the then Executive Director of UNEP, Mustapha Tolba, established a group of experts to analyze the need for and modalities of a biosafety protocol. This group of experts was referred to as Panel IV. It was co-chaired by Veit Koester of Denmark and myself of Ethiopia. A total of 29 experts from 12 countries (including the European Economic Community) as well as 5 organizations participated in the three meetings of Panel IV. The Panel's report was submitted to UNEP on 28 April 1993 (UNEP 1993).

2.3. International Technical Guidelines for Safety in Biotechnology
The Departments of Environment of the Netherlands and the United Kingdom convened international experts in Ascot, England, on 9–10 March 1994 and developed the first draft of technical guidelines on safety in biotechnology. The draft was discussed by invited experts from 17 countries in May 1994. The representatives of the United Kingdom and the Netherlands were made focal points for receiving further comments on these guidelines (NME & UKDE 1994). The draft guidelines were promoted by UNEP and subjected to further consultations in the various regions (UNEP 1995a). A 'global consultation of government-designated experts on [the] international technical guidelines for safety in biotechnology' was then held in Cairo, Egypt, on 11–14 December 1995, and this meeting adopted the final text of the 'United Nations Environment Programme International Technical Guidelines for Safety in Biotechnology' (UNEP 1995b). Though the meeting was considered global, only 59 countries and the European Commission took part (UNEP 1995b). Based upon a decision made at this meeting, UNEP organized an international workshop on 31 October – 1 November 1996 in Buenos Aires, Argentina, to review the implementation of these Guidelines (UNEP 1996), which was attended by experts from 55 countries. The last statement in the recommendation from this workshop was a call to UNEP 'to review periodically the Guidelines' (UNEP 1996).

This workshop was soon followed by the Third Conference of the Parties to the Convention on Biological Diversity (COP III) on 4–15 November 1996, also in Buenos Aires. On 8 November, the Committee of the Whole of COP III decided to consider the negotiations on the biosafety protocol and progress on the implementation of the UNEP International Technical Guidelines for Safety in Biotechnology together as one item (UNEP 1997). The subsequent COPs focused only on the biosafety protocol negotiations and the UNEP Technical Guidelines on Safety in Biotechnology faded into oblivion as an issue for the COP to discuss.

2.4.Negotiations on the Cartagena Protocol on Biosafety

UNEP's Panel IV Report (UNEP 1993) had a majority view that called for negotiating a biosafety protocol, and a minority view that stated that there was no need for a biosafety protocol. The minority view was that of the representative from the United States of America, supported by two representatives of the Organisation for Economic Cooperation and Development (OECD).
By the time the Report of Panel IV was finalized, the Executive Director of UNEP who had established the Panel, Mustapha Tolba of Egypt, had been replaced by Elizabeth Dowdeswell of Canada.

Under Elizabeth Dowdeswell, UNEP tried to avoid the Panel IV Report from being considered in the meetings of the Intergovernmental Committee on the Convention on Biological Diversity (ICCBD), which was the body that had been created to prepare the ground for the implementation of the CBD while it was awaiting entry into force (UNEP 1992).

The Interim Secretariat of the CBD in UNEP under Dowdeswell oversaw the functioning of the ICCBD. The document prepared by the Interim Secretariat for the work of the ICCBD on biosafety deliberately left out mentioning the Panel IV Report. The first meeting of the ICCBD, which took place in Geneva, Switzerland, 11–15 October 1993, focused only on capacity building and international cooperation in biosafety (CBD Int. Sec. 1993). The reason can be revealed by studying the document on biosafety presented to the 2nd session of the ICCBD, which took place in Nairobi, Kenya, on 20 June – 1 July 1994 (UNEP 1994). In its 19th paragraph, this document suggested the ICCBD should define the term 'protocol' and added that it 'may then proceed to consider whether or not a protocol is needed; whether it is an immediate need or whether its development is envisaged for the future'. However, in its 18th paragraph it states: 'As familiarity with LMOs increases and experience accumulates ... the patterns of regulation will likely evolve from initial stringency to less stringent requirements'. In its 20th paragraph, it states: 'If a protocol is not needed at all or if it is only needed in the future, the Committee [ICCBD] may wish to consider whether other instruments such as voluntary codes of conduct and guidelines could be considered'. To make this view palatable, the document's 14th and 21st paragraphs emphasize the need for capacity building in developing countries.

The UNEP International Guidelines for Safety in Biotechnology were, therefore, promoted by Dowdeswell's UNEP in order to stifle the call for a biosafety protocol made by UNEP's own Panel IV. This was realized by the environmental NGOs and by developing countries which therefore supported the Panel IV Report and called for starting negotiations on a biosafety protocol.

Both UNEP's attempt to prevent negotiations on biosafety from starting and the calls for them to start continued during the First Conference of the Parties to the CBD, which took place in Nassau, the Bahamas, on 28 November – 9 December 1994. From among the NGOs, Third World Network, Greenpeace, the Community Nutrition Institute, and Friends of the Earth distributed a statement to this effect on 5 December 1994. On 6 December, they again distributed a similar statement, this time joined also by Accion Ecologica, condemning particularly Australia, Austria,

Canada, the European Union, Finland, Japan, New Zealand, Norway, Sweden, and Switzerland for the terms of reference of the Open-ended Ad Hoc Group of Experts on Biosafety which COP I established. According to these NGOs, the terms of reference did 'not address the question of modalities, but rather entered into a never ending process considering the need' for a biosafety protocol.

A Panel of Experts on Biosafety, established by the Secretariat of the Convention to prepare for the meeting of the Open-ended Ad Hoc Group of Experts on Biosafety, presumably in order to bypass the Panel IV Report, met in Cairo, Egypt, on 1–5 May 1995. This Panel's report made no mention of the report of its predecessor, Panel IV (CBD report 1995). Its Paragraph 35 states: 'The adoption of an international framework, such as guidelines, regulations, codes of conduct or a protocol, does not of itself insure safety'. Its overall tone is that of letting things be: that of not taking any immediate international action.

2.4.1. Negotiations in the Open-ended Ad Hoc Group of Experts on Biosafety
Following Decision I/9 of COP I, an Open-ended Ad Hoc Group of Experts on Biosafety met in Madrid, Spain, on 24–28 July 1995. Experts from 83 countries, 21 from Africa, and one regional organization (the European Community) participated in a decisive debate that shaped the future of biosafety. Dr Emilio Munoz of Spain was elected as the chair of the meeting. Dr Luiz Antonio Barreto de Castro of Brazil representing Latin America and the Caribbean, myself representing Africa and Dr Sugiono Moelzopawiro of Indonesia representing Asia were elected as vice-chairpersons. The four of us constituted the Bureau of the meeting.

The meeting examined the report of the Cairo Panel of Experts (CBD report 1995). It soon became clear that this document was not acceptable to all delegates. In fact, of all the parties to the CBD, only Australia and Canada were fully in favour of this document. They were fully supported by the United States of America, which, though not a Party, was most active in canvassing opinion.

As the meeting continued, the call for recommending to COP II an authorization of negotiations on a biosafety protocol grew. Because of the role I had played in Panel IV as its co-chairman, virtually all delegates from developing countries rallied behind me to make this call (UNEP 1993).

Feeling the need to break this unity among delegates from developing countries, some of the delegates from the United States pointed out rightly, that the call for negotiating a protocol was strongest from Africa. However, they explained it as an unjustified ignorant fear from the most backward continent about this avant-garde technology called modern biotechnology. This started to cause defections from the call for a protocol. At the same time, Professor Elaine Ingham of Oregon State University in the United States explained her research results on the genetically engineered soil bacterium *Klabsiella planticola.* She pointed out how this normally useful bacterium had been rendered dangerous to plant life by genetic engineering. After that, the developing country delegates rallied around me again and the call for a protocol grew louder. Of the industrialized countries, New Zealand, Germany, Japan, and South Korea sided with Australia and Canada. Finally, after much debate, they accepted a decision that recommended to COP II that a biosafety protocol be negotiated.

The main issues to be covered by the protocol were also identified (CBD elaboration 1996). However, the industrialized countries, with a few notable exceptions, did not want socio-economic considerations and liability and redress to be included in the protocol.

2.4.2. Negotiations in the Open-ended Ad Hoc Working Group on Biosafety
The Open-ended Ad Hoc Working Group on Biosafety was established by COP II through Decision II/5. The first meeting of the Working Group was in Aarhus, Denmark, on 22–26 July 1996 (CBD report 1 1996). On the first day, the African Group elected me as its spokesman. The various regional groups also elected their spokespersons.

The meeting reviewed and elaborated the items identified by the Madrid meeting of the Open-ended Ad Hoc Groups of Experts. The question of whether or not to include socio-economic issues and liability and redress divided the G77 and China. Brazil, South Korea, Costa Rica, and Argentina took the stand of the industrialized countries that these two items should not constitute a part of the protocol. Therefore, at the suggestion of Amarjeet Ahuja of India and myself, the developing countries with the exception of the aforementioned four, formally pushed for these two issues as essential, and the G77 and China stopped functioning as a group in any meaningful manner in the subsequent biosafety negotiations.

The African Group asked me to draft a biosafety protocol on behalf of Africa. Upon returning to Ethiopia, I initiated the drafting of the protocol. Under my chairmanship, experts from four institutions developed the working draft. Once funding was secured, the African Group met in Addis Ababa on 23–25 October 1996 to revise and adopt the draft protocol. Early on during the meeting, the South African representative tried to steer the African Group towards a minimalist direction so that the protocol would be weak. He was not followed by any delegate from another African country. I realized that he did not want the South African delegation to formally separate from the African Group for fear of a political backlash at home, but would continue causing as much difficulty as he could during negotiations. Neither did I want the African Group to formally exclude the South African delegation because that would have reduced our political impact as a Group. Managing his disruptive tactics was the greatest difficulty I had in leading the African Group. In spite of his attempts, the African Group that met in Addis Ababa adopted the text of a draft protocol. I submitted this draft protocol in the name of the African Group to the CBD Secretariat at the COP III in Buenos Aires on 4–15 November 1996.

The second meeting of the Open-ended Ad Hoc Working Group on Biosafety took place in Montreal, Canada, on 12–16 May 1997 (CBD report 2 1997). The submissions of views by governments on the provisions of the protocol were discussed by the meeting (CBD IGS 1997, CBD compilations 1997). Except for the submission of the African Group, which was in the form of legal text, the remaining submissions were descriptive in nature. Though these views showed the diversity of thinking, they could not be used to start negotiations. The meeting was, therefore, basically for exchanging opinions. The meeting established a Contact Group to consider how the definitions of key terms should be formulated.

The third meeting of the Open-ended Ad Hoc Working Group took place in Montreal, Canada, on 13–17 October 1997. More detailed submissions by governments were the basis of the negotiations (CBD GS 1997). South Africa submitted its own separate text, but would still not formally declare that it disagreed with, and was splitting from, the African Group. Therefore, it continued to disrupt African Group meetings from within. The meeting of the Working Group widened the scope of the work of the Contact Group to include negotiating on Annexes. It also established (divided into) two Sub-Working Groups and started negotiating on the consolidated text of country submissions, trying to produce an agreed text. Delegates could move in and out of the Sub-Working Groups and the Contact Group as their interests dictated.

The fourth meeting of the Open-ended Ad Hoc Working Group took place in Montreal, Canada, on 5–13 February 1998 (CBD report 4 1998). The negotiations, which continued in the two Sub-

Working Groups and two Contact Groups already established, became highly polarized. A second Contact Group was also created, to focus on financial and institutional issues. The delegation of the United States of America tried to divide the African Group by calling us for consultations on sub-regional bases. Attempts by South Africa to organize the delegates from the Southern African Development Community to speak to the United States delegation on their own failed, because the other delegates refused to speak to the United States delegation except as the African Group. However, we had consultations with the European Community and with other regions as an African Group.

The fifth meeting of the Ad Hoc Open-ended Working Group took place also in Montreal, Canada, on 17–28 August 1998. Many states submitted final portions of their proposed detailed wording for the provisions of the protocol, as had already been done by the African Region (CBD IGS 1997; CBD report 5 1998). As a consequence, the first draft text of the protocol, albeit full of brackets, was compiled and the negotiation process became clearly defined (CBD report 5 1998). So, too, did the divisions among states and groups of states. It became clear that the industrialized countries, as a bloc, were blocking any negotiations on liability and redress by simply refusing to comment on the issue. Therefore, the delegates of developing countries also refused to comment on any issue other than liability and redress. After one day of near total silence, this forced the industrialized countries to agree to seriously negotiate on liability and redress, and the negotiations continued. The question of whether products of LMOs should be regulated by the protocol also became divisive. The African Group and most developing countries wanted products of LMOs to be covered by the protocol. The issue continued unresolved to the end of the negotiations.

Upon returning home, now that the negotiating text was available, I commented on the implications of each bracketed text, pointed out what our preference should be, and sent these comments to my other African colleagues. Because African delegates had read my comments and thought about the issues, taking a common position during the subsequent negotiation session became easier.

The Chairman of the Working Group rightly gauged the divisions among delegations to be very wide, and the time left too short. Trying to hasten the negotiations, he called a meeting of the Bureau of the Working Group – which included the elected representative from each Region – and a selected number of other delegates on 21 and 22 October 1998 in Montreal. This was dubbed the ‘Extended Bureau’. The Extended Bureau discussed ways of hastening the negotiations. The most intriguing suggestion was proposed by the European Union, which ‘strongly urges states and regional integration organizations to operate as many of the provisions as possible of the protocol’ (CBD Working Group 1998). If passed, this would have reduced the protocol from an international law to a suggested procedure. This draft decision was not tabled at the subsequent meeting of the Working Group and, in the final analysis the meeting of the Extended Bureau did not help much.

The sixth and final meeting of the Open-ended Ad Hoc Working Group on Biosafety took place in Cartagena, Colombia, on 14–22 February 1999. The negotiations were scheduled to be finalized at that meeting. Negotiations continued in the two Sub-Working Groups and two Contact Groups. The South African delegate’s disruption of the African Group had been noted in South Africa and he was consequently dropped from the delegation. The negotiating text had hundreds of brackets and it seemed certain that no consensus text would be produced from it. LMO commodities, products of LMOs, socio-economic issues, the Precautionary Principle, and the scope of the protocol remained divisive. On 15 February, the Chairman asked the Regional Groups to elect his Friends of the Chair from among their members, but he handpicked

Mohammed Mahmoud El Ghaouth of Mauritania and Darryl Dunn of New Zealand as his Vice Chairmen to help him chair the meetings of the Friends of the Chair. On the evening of 15 February, the Friends of the Chair had its first meeting. The Chairman had said that his Friends of the Chair were to advise him and not to negotiate. In practice, these two functions became indistinguishable.

On 16 February 1999, formal negotiations which were open to all delegates continued. In the evening, the Chairman, with the Friends of the Chair, reviewed progress, and found it to be minimal. On 17 February, the Chairman, following a suggestion by one of the Bureau Members, informed the Bureau that anything agreed in the Sub-Working Groups and Contact Groups would not be re-opened in Plenary, which would merely endorse the agreement. I pointed out to him that this would not be transparent and was thus undemocratic especially since most developing countries were represented by single delegates who could not be present in the Sub-Working Groups and Contact Groups simultaneously. However, he and his Vice-Chairman, El Ghaouth, tried to implement it, contributing to the failure of the negotiations. In the evening, he announced that he would produce a Chairman's text the next day.

This new text galvanized the groupings into even greater confrontation. Especially, three strong groupings emerged. The developing countries, with the exception of Mexico, Argentina, Chile and Uruguay, created the Like-minded Group of Developing Countries and elected me as their chief negotiator. Canada, Australia, Argentina, Uruguay, Chile, and the United States of America had already formed the Miami Group. These two groups were the furthest apart on most substantive issues. As a result of these groupings, the usual UN Regional groups could no longer continue. Mexico joined with Japan, Switzerland, Norway, and New Zealand to form the Compromise Group. The Central and Eastern European Group remained intact. These two groups became rather quiet in the confrontation. The European Union stayed very active, with its position on most of the divisive issues being in between those of the Miami and the Like-minded Groups.

On Saturday 20 February 1999, the chief negotiators of the various Regional Groups, with their advisors, met twice over the new draft under the Chairmanship of Veit Koester, with the Environment Minister of Colombia, H.E. Juan Mayr Maldonado, facilitating the negotiations. On Sunday 21 February, the Chairman produced a revised text. It did not bring the parties any closer. During the night, H.E. Juan Mayr Maldonado chaired negotiations between the chief negotiators of the Miami, European and Like-minded Groups. The chief negotiator of the European Group offered what he called 'a package' to the Miami Group. The chief negotiator of the Miami Group also had a list of changes he wanted in the Chairman's revised text. The suggested changes from both Groups wanted the provision on the Precautionary Principle to be deleted. Both sets of proposals were unacceptable to me. The proposal of the Miami Group was also unacceptable to the chief negotiator of the European Union, and vice versa. So, the negotiations failed.

In spite of unusual and extraordinary attempts by the Chairman to push his new draft protocol through, it was resoundingly rejected early on the morning of 22 February 1999, and the negotiations by the Open-ended Ad Hoc Working Group on Biosafety were formally abandoned. It was agreed, however, that the text would be presented to the Extraordinary COP of the CBD. A formal Extraordinary Session of the Conference of the Parties, chaired by H.E. Juan Mayr Maldonado, the Minister of Environment of Colombia, had been planned to approve the text of the finalized protocol. Instead, the Extraordinary COP had to restart the negotiations almost from scratch, though it took into consideration the draft protocol passed on to it by the Ad Hoc Working Group on Biosafety.

2.4.3. Negotiations in the Extraordinary Sessions of the Conference of the Parties to the Convention on Biological Diversity

The meeting of the Extraordinary COP started only five minutes after the negotiations of the Open-ended Ad Hoc Working Group ended in the early morning of 22 February 1999. Therefore, the outgoing Chairman of the negotiations, Veit Koester, gave only a short verbal report.

At the end of the meeting, the Chairman of the Extraordinary COP convened another negotiation session involving the chief negotiators of the Miami Group, the European Union and the Like-minded Group. The chief negotiator of the European Union again came up with his previous package, which, among other problems, accepted the deletion of the Precautionary Principle, as did the chief negotiator of the Miami Group with his set of proposed changes. The two continued discussing their respective proposals as if I did not exist. It looked as if they were about to agree. At this stage, even the European Union's package contained a provision for virtually unregulated import and export of LMO commodities, with the provision that it would be reviewed at the first meeting of the Parties after the Protocol had come into force. Therefore, I rejected both sets of proposals. I told the two chief negotiators that ignoring the developing countries had completely died with the colonial era. The Chairman tried to break the deadlock by introducing an enabling clause similar to that of the European Union, which, he thought, would have made it possible for me to accept the Miami Group's position on LMO commodities. The enabling clause stated that the issue of LMO commodities would be renegotiated after the protocol came into force. However, the Miami Group's chief negotiator rejected it. I was also going to reject it, but one rejection was good enough and I kept quiet.

On 23 February 1999, the last day of negotiations, the chief negotiators of all the Regional Groups (i.e. not only those of the Miami, European Union and Like-Minded Groups) met under the chairmanship of H. E. the Minister of Environment of Colombia. It became clear that there would be no agreement. The Miami Group promised to come back to the negotiations after one year with a new proposal that took into account the difficulties on LMO commodities expressed by me on behalf of the Like-minded Group.

Nonetheless, informal consultations continued by all parties. In an informal discussion with John Herity of Canada, I had suggested that, if the Miami Group knew the nature of the agricultural systems in developing countries, where most crop gene pools are found, their delegations would appreciate our problems more clearly. He took up the challenge. Therefore, delegates from the Miami Group of countries visited Ethiopia on 2–6 September 1999 and toured farms, homesteads and grain markets. They left Ethiopia saying that this was going to help them to come up with an acceptable proposal for the next negotiation session.

In the meantime, I wrote an analysis of the negotiations in Cartagena and of the latest text of the draft Protocol, pointing out what I thought we should fight for, and distributed it to the delegates of the Like-minded Group. This helped consolidate the views of the Group.

On 15–19 September 1999, the Chairman of the Extraordinary COP invited delegations to informal consultations in Vienna. These consultations showed more clearly the difficulties that the protagonist Regional Groups had with one another's positions. It also helped further consolidate the somewhat amorphous Like-Minded Group, which I continued to lead. I helped this consolidation process along by writing an analysis of the informal negotiations of Vienna and of the draft text of the protocol and distributing it to the members of the Like-Minded Group before the final negotiations by the Extraordinary COP.

On 30 November – 3 December 1999, the Miami Group, led by the United State of America, tried to have a decision on trade in LMO commodities passed at the Seattle Ministerial Session of the World Trade Organization (WTO). I went to Seattle and lobbied primarily for African delegations

to oppose this. Others also lobbied the delegations they could access. The result was that the WTO did not pass any decision on trade in LMO commodities. In fact, the ministerial negotiations collapsed and I am convinced that the issue of LMO commodities contributed its share to this. Probably as a result of all this, the Miami Group decided to negotiate on LMO commodities seriously in the Biosafety Protocol.

The final negotiations by the Extraordinary COP were in Montreal on 24–28 January 2000, and the text of the Cartagena Protocol on Biosafety was agreed. This final negotiation session of the Extraordinary COP was also difficult.

The negotiations on LMO commodities were primarily between the Miami Group and the Like-minded Group. The European Union negotiators, presumably confident that their internal laws were robust enough to protect them from unwanted LMO commodities, were, though, supportive of the Like-minded Group, not willing to fight much on the issue. On the other hand, they were very keen on having clear provisions on labelling LMOs and LMO products in the protocol. The Miami Group continued to oppose labelling, the Precautionary Principle and the treatment of products of LMOs as an issue. Both the Miami and European Union Groups continued to oppose any meaningful negotiations on liability and redress.

The Like-minded Group had wanted to join forces with the European Union to push for labelling. However, the prevaricating attitude of the Brazilian delegation had prevented us so far. In this session, the Brazilian delegation also became supportive of labelling. Nevertheless, I decided to hold back on the issue until I was sure that the European Union delegation would support the Like-minded Group until the negotiations on LMO commodities were finalized, and they did. The result was the somewhat clumsy compromise we struck with the Miami Group that is now in Article 11 of the Cartagena Protocol.

The Like-minded Group also wanted the Scope of the Protocol (Article 4) to include all LMOs and not to explicitly exclude any categories of LMOs. Though we realized, since the Miami and European Groups were united on the issue, that pharmaceuticals (Article 5 of the Protocol) and transit and contained use (Article 6 of the Protocol) would not fully be subject to the advance informed agreement procedure (Articles 7–10 of the Protocol) under the Protocol as we had wanted. We did not want these exceptions to be made at the level of the Scope of the Protocol (Article 4). We wanted to make it always possible for the Protocol to consider all LMOs. Therefore, because the Miami Group wanted a separate provision on LMO commodities and the European Union wanted labelling, we managed to obstinately bargain with them both to accept an all inclusive Scope (Article 4).

The European Union negotiators had changed their position since the failed negotiations of Cartagena and, with the support of the Like-minded Group they pushed for the Precautionary Principle (Articles 10.6 and 11.8 of the Protocol). The Miami Group thus had to accept the Precautionary Principle. I think the preceding collapse of the WTO negotiations in Seattle, together with the unity between the European Union and the Like-minded Groups, forced them to give up their wish not to subject the Protocol to the Precautionary Principle.

As I have already pointed out, LMOs that are transiting through a country are not subject to the advance informed agreement procedure (Article 6.1 of the Protocol). The Like-minded Group did not want this exception. The compromise that was forced on us was that of being allowed to prohibit through the Biosafety Clearing-House those specific LMOs that a state considered particularly dangerous. This will require capacity to access information through the Biosafety

Clearing-House and alertness to place objectionable LMOs in the Biosafety Clearing-House. Such capacity is often lacking in developing countries and it has to be developed.

Excluding contained use from the advance informed agreement procedure was unacceptable to the Like-minded Group. Norway proposed that agreement could be reached on the issue if the definition of what 'contained use' would constitute were to be legally left to the country of import. This made it possible for Article 6.2 to be formulated in a way that we could accept. Unlike the Miami and European Union Groups, we wanted LMO pharmaceuticals for human use also subjected to the advance informed agreement procedure. We were convinced that there were (and there still are) no 'other relevant international agreements or organizations' that are responsible for LMOs that are pharmaceuticals for humans. Therefore, these LMOs must be governed by the Cartagena Protocol. It thus became possible for us to accept Article 5 of the Protocol as a compromise. This will, however, require alertness in the World Health Organization and possibly in other forums so that rules on LMO pharmaceuticals for humans that violate the advance informed agreement procedure are not adopted anywhere. It should be noted that, because Article 5 of the Protocol is restricted to pharmaceuticals for humans, pharmaceuticals for animals have to be subjected to the advance informed agreement procedure (Articles 7–10) of the Protocol.

The Miami Group and some members of the European Union opposed the position of the Like-minded Group on products of LMOs. Therefore, we were forced to give it up. However, the Risk Assessment Annex (Paragraph 5 of Annex III) enables the assessment of risks posed by LMO products. This, in combination with national laws on environment and health, can fill the gap created.

The most important deficiency of the Protocol as far as developing countries are concerned is in the absence of provisions to govern liability and redress. A promise was made to continue negotiations after the coming into force of the Protocol (Article 27), and the Like-minded Group felt that this promise was all that the negotiations of the Protocol could yield at that time, and accepted the negotiations of the Protocol as finalized.
Another issue left pending by the Protocol, in spite of the push by the European Union towards the end of the negotiations, supported by the Like-minded Group, was that of packaging and labelling (Article 18, Paragraphs 2(a) and 3). This was the last issue to be negotiated before the Cartagena Protocol on Biosafety was adopted by the Extraordinary COP at *c.* 6 a.m. on 29 January 2000 after an all night session.

2.5 Negotiations on Issues Left Pending by the Cartagena Protocol on Biosafety
Article 27 of the Protocol stipulates that, at its first meeting, the Conference of the Parties to the Convention on Biological Diversity serving as the meeting of the Parties to the Cartagena Protocol (COP-MOP) shall 'adopt a process with respect to the appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movement of LMOs'. Through Decision BS-1/8, the first COP-MOP, which convened in Kuala Lumpur, Malaysia, on 23–27 February 2004, adopted the terms of reference of an Open-ended Ad Hoc Working Group of legal and technical experts to negotiate a liability and redress regime for the Protocol (CBD Handbook 2005). The Working Group has already held two negotiations sessions in Montreal in May 2005 and February 2006. Article 27 of the Protocol expects the Working Group to complete its negotiations within four years, i.e. before February 2008.

The second issue left pending at the adoption of the Protocol has two components. The first component (Article 18.2 (a) of the Protocol) requires the COP-MOP to take a decision on the

detailed labelling of LMO commodities 'no later than two years after the date of entry into force of this Protocol'. The Protocol entered into force on 11 September 2003. A labelling scheme should therefore have been finalized at the second meeting of the COP-MOP, which took place in Montreal on 30 May – 3 June 2005. However, New Zealand and Brazil prevented the meeting from reaching a consensus on labelling requirements for LMO commodities.

Therefore, the issue was taken up again at the third meeting, which took place in Curitiba, Brazil, on 13–17 March 2006. Brazil had changed its previous position and asked for a labelling system that gave sufficient detail, as had all the other Parties except for New Zealand and the members of the Miami Group, which are all non-Parties. New Zealand has laws that prohibit LMO commodities from entering its territories. The New Zealand delegation was, therefore, apparently acting on behalf of the Miami Group; as a Party to the Protocol, New Zealand could block consensus, but as non-Parties the Miami Group of countries could not. Dismayed by this, non-governmental organizations in New Zealand launched a campaign, and as a result, many letters were written to the Prime Minister of New Zealand by concerned people and organizations from all over the world. In this way, the New Zealand delegation at the meeting in Curitiba was forced into silence. Therefore, in spite of attempts by the Miami Group to prevent it, a decision requiring detailed labelling of LMO commodities was adopted (CBD Decision BS/111/10 2006).
The second component (Article 18.3 of the Protocol) requires the COP-MOP to evaluate the need for and modalities of developing standards for the packaging and transport of LMOs. The completion of this requirement is not time-bound. The process started at the third meeting in Curitiba, and it may be a few years before it is finalized (CBD Decision BS/111/10).

3. A Brief Evaluation of the Appropriateness of the Provisions of the Cartagena Protocol on Biosafety

In evaluating the provisions of the Cartagena Protocol on Biosafety, I need first to state the premises I start from. My premises are the following:

- Since once released into the environment LMOs cannot be recalled, a strict adherence to the Precautionary Principle is required in biosafety.
- Since, on the whole, the number of living species increases towards the equator, unforeseen impacts of LMOs also increase towards the equator. This means that risk assessment becomes more complex towards the equator.
- Since the countries with the least scientific capacities are found towards the equator, mistakes in both risk assessment and risk management are likely to increase towards the equator.
- Since the poorest countries are found towards the equator, mistakes in managing LMOs are likely to be most devastating towards the equator.
- Since, on the whole, the number of species increases towards the equator, the possibilities of solving perceived problems of development by choosing from among the diverse varieties of the species available rather than trying to create transgenic organisms increase towards the equator.

This makes genetic engineering less relevant towards the equator.
Starting from these premises, I can point out the following difficulties with the main provisions of the Protocol.

3.1 General Provisions

Article 2.4 starts by stating that any Party can take action more protective than the Protocol. However, it weakens this possible action by qualifying it. It specifies that such action must be consistent with the objective and the provisions of the Protocol. The objective of the Protocol (Article 1) is broad and would thus allow a lot of room. However, the provisions are, of necessity,

much more detailed and they thus arguably restrict the more protective action that can be taken. Article 2.4 also allows international law, e.g. on trade, to restrict the more protective action that can be taken.

3.2 The Scope
The scope of the Protocol (Article 4) is good. However, Article 5 weakens it when it comes to LMOs that are pharmaceuticals for humans. It does so by making it essential, especially for the countries with least wealth and scientific capacity, to actively watch the World Health Organization and other international institutions lest they institute procedures or laws that bypass the advance informed agreement procedure. Article 6 similarly weakens the scope with regard to LMOs in transit and LMOs for contained use.

3.3 LMO Commodities
Though the provisions of Article 11 of the Protocol make the advance informed agreement the basis of decision taking in importing LMO commodities, the notification process takes place via the Biosafety Clearing-House (Articles 11.1, 11.6). This requires a well developed capacity even in a poor importing country. It would have helped poor importing countries if LMO commodities had been treated in the same way as LMOs intended for direct release into the environment (Articles 7–10).

3.4 Simplified Procedure
Article 13 of the Protocol allows the simplification of the advance informed agreement procedure in dealings between Parties that want to do so. This leaves poor developing countries vulnerable to pressure to accept simplified procedures from rich and powerful countries that produce LMO commodities and thus weakens the applications of the Precautionary Principle.

3.5 Bilateral, Regional and Multilateral Agreements and Arrangements (Article 14) and Non-Parties (Article 24)
Article 14 of the Protocol, especially in combination with Article 24, can also be used to lower protection in weaker countries. For example, Mexico, though a Party to the Protocol, insisted on including a paragraph that it interprets as exempting it from the labelling requirements finalized in the third meeting of the COP-MOP. This was because Mexico is a member of the North American Free Trade Agreement and thus has to import unlabelled LMO commodities from the United States of America and Canada. It can be expected that the United States will insist on similar concessions when it makes bilateral or multilateral agreements with other Parties to the Protocol.

3.6 Confidential Information
Article 21 of the Protocol allows for an exporter of a LMO to ask any of the items of information it supplies the importer to be kept as confidential. Though the same Article allows the importer to refuse keeping information that is necessary for biosafety as confidential, it makes this refusal conditional upon giving reasons. Again, this may subject a poor importing country to complications that it has little capacity to deal with. The consequence is then likely to be that it will accept treating information that is important for ensuring biosafety as confidential.

3.7 Socio-economic Considerations
Article 26 of the Protocol allows importing Parties to ‘take into account, consistent with their international obligations, socio-economic considerations arising from the impact of’ LMOs when deciding to import or reject those LMOs. For a poor developing country, socio-economic considerations should have a very high weight in decision taking on whether to import a given

LMO or not, especially when that LMO is a commodity. However, Article 26 diminishes this weight by invoking 'international obligations'.

4. Concluding Remarks

The Cartagena Protocol on Biosafety is the first environmental international law negotiated to pre-empt possible problems with the entirely new technology, recombinant DNA technology. This is why it is also the first environmental international law that is based on the Precautionary Principle. It is not surprising, therefore, that the process of negotiating it has been very divisive. It is equally not surprising that it satisfies nobody completely. Time will show whether negotiating it has set a good precedent to ensure the safety of emerging new technologies.

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