



August 2010

Updates: Current Developments in the Discourse Field Biodiversity & Climate

Alexandra Lux^{1, 2}

¹Project Area F "Knowledge Transfer and social-ecological aspects of climate induced changes in biodiversity"

²Institute for Social-Ecological Research (ISOE)

Abstract: With which political developments is BiK^F confronted as a research centre as well as concerning its research and transfer efforts? Are there any hints for emerging research questions that meet practical needs? This paper gives an overview – as of June 2010 – on priority issues in the run-up to CBD's COP-10, the 10th Conference of the Parties to the Convention on Biological Diversity (CBD), which will take place in Nagoya/Japan in October 2010. Highlighted discourse threads are: (1) the state of negotiations for an Access and Benefit Sharing (ABS) regime within CBD, (2) European and international preparations for renewing the political objectives for protecting biodiversity (Post-2010 Targets) and (3) the recent decision on an Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES). These three threads are selected against the background of an in depth analysis of the discourse field which was carried out in 2008/09 for BiK^F. They show how the field progresses and which developments are worth being incorporated into BiK^F is further work.

This Knowledge Flow Paper documents the talk given by the author during the second BiK^F Retreat, 17–18 July 2010.

1 Introduction

With the interactions of biodiversity and climate change BiK^F addresses a rather broad field. For a reasonable structuring of this field, the method Problemoriented Discourse Field Analysis (DFA) was advanced and applied (cf. Jahn/Lux 2009 and Textbox below). This paper gives an overview on current developments in the discourse field of "Climatically induced changes of biodiversity" that have occured in the first half of 2010. It builds upon the in-depth DFA, carried out in 2008/09 for BiK^F. The aim of the analysis as well as of its update is to provide a structured overview of political and societal developments which BiK^F's research topics are connected to. Thus, the task is to identify priority issues, key actors and their positions, to distinguish certain knowledge of contested knowledge as well as to point out possible future research questions - as formulated by the actors or deduced from analysing contested knowledge.

The present study was financially supported by the research funding programme "LOEWE – Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz" of Hesse's Ministry of Higher Education, Research, and the Arts.

The initial discourse field analysis on *Climatically Induced Changes of Biological Diversity* was carried out for a better understanding of an emerging political field (cf. Lux/Jahn 2009, Klipstein 2009, Stiehr 2009, Sturn 2009). The Results were presented during the first BiK^F Retreat in 2009 and focussed on three discourse arenas (cf. Lux/Jahn 2009):

- The outcome and processes of CBD's 9th Conference of the Parties in Bonn, May 2008,
- The implementation of the German National Biodiversity Strategy in force since Nov 2007 and
- The outcome and uptake of the Millennium Ecosystem Assessment, published in 2005.

By revealing the specific structures of each arena the diversity of relevant topics became obvious as well as contradictions among the three of them.

But it becomes apparent, that the results of this DFA concern a number of time-dependent issues. That goes to say that COP-9 is over now and the international community is preparing for COP-10, the 10th Conference of the Parties to the Convention on Biological Diversity (CBD), which will take place in Nagoya/Japan from 18 to 29 October 2010. Regular up-

dates of DFA seem worthwhile, but will not be as systematic as the first discourse field analysis. The main focus will be on showing how the three arenas progress and which developments are worth being incorporated into BiK^F's further work.

By reviewing publications and booklets, press releases, etc. it became clear that the preparations for CBD's COP-10 are high on the current biodiversity agenda. Nevertheless, there are strong connections to the three initial discourse arenas and the updates are to give an overview – as of Mid June 2010 – on priority issues in the run-up to Nagoya (figure 1):

- (1) Status of negotiations for an Access and Benefit Sharing protocol (ABS) within CBD for the use of genetic resources, as this is a priority topic for Nagoya.
- (2) European and international preparations of political objectives for protecting biodiversity (Post-2010 Targets) as current CBD-targets expire in 2010 and the new ones should reflect international and regional experiences together with the implementation of measures.

(3) The recent decision for an Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES) follows the suggestions made by the Millennium Ecosystem Assessment (MA).

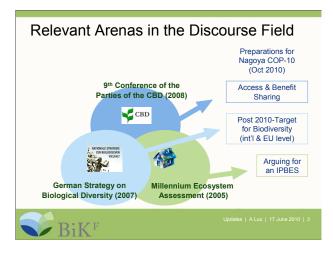


Fig. 1: Linkages between the in depth DFA and the updated discourse threads

Problem oriented Discourse Field Analysis (DFA):

Taking up methods from social sciences such as discourse analysis and policy field analysis, the DFA is a method to identify relevant actors and issues within a discourse field. *Discourse fields* are here defined to be dynamic and plural contexts in which the understanding of a problem and suggestions for its solution are negotiated. They are characterised by a diversity of opinions, information and evaluations of the state of knowledge, without the implicit necessity of the emergence of one dominant position. These negotiation processes take place within *discourse arenas* – i.e. concrete occasions like conferences, reports or concepts-in-use which bring together actors from politics and administration, civil society, business, science and so on. In order to investigate such discourse fields, texts, statements, documentations, protocols, interviews or similar materials are analysed. The analysis of these materials allows the discourse field to be broken down into *discourse threads* – i.e. into topic areas which refer to an overarching issue (e.g. climate caused changes in biodiversity).

A problem oriented DFA particularly reveals, what kinds of knowledge within a specific discourse field might lead to conflict among the various actors involved. Thus, contested knowledge is brought into focus as a problematic state of affairs. Like that, priority issues, key actors and their positions are displayed systematically, and the contested knowledge located within society, and between society and science, is determined. It is furthermore possible by means of a DFA to determine the need for research and for action within a discourse field. The method is particularly appropriate for investigating those relations of interdependency in question that are highly complex. As the shaping of public opinion and decision making is marked here by a high degree of uncertainty which in turn leads to the probability of contested knowledge. (Jahn/Lux 2009)



2 Recent Developments in the Discourse Field

2.1 Access & Benefit Sharing

One of the three objectives of the CBD is the "fair and equitable sharing of the benefits arising out of the utilization of genetic resources" (figure 2). The aim is to find transparent ways for balancing the interest of those communities who traditionally use these resources and those states and enterprises who want to use them commercially. The most important requirements for such regulations are transparency, legal certainty and non-discrimination. Access and Benefit Sharing (ABS) is currently one of the most contested issues of the CBD. It is high on the agenda for Nagoya in Oct 2010.

Article 1 - Objectives of CBD

"The objectives of this Convention ... are

- the conservation of biological diversity,
- the sustainable use of its components and
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding."



Updates | A Lux | 17 June 2010 | 4

Fig. 2: Article 1 of the Convention on Biological Diversity

Since the CBD came into effect in 1993, the international community has not been able to define how ABS should be organised. After the establishment of an Ad Hoc Open-Ended Working Group on Access and Benefit Sharing in 2001 (COP 5, Decision V/26) a first agreement was reached with the voluntary Bonn Guidelines (COP-6, Decision VI/24) which suggests measures on:

- How to include the principles of prior informed consent and mutually agreed terms into bioprospecting agreements,
- How to deal with traditional knowledge on an equitable basis,
- Disclosure of holders of traditional knowledge and country of origin in patent applications,
- A certification system for trade in genetic resources. (cf. Rosendal 2006)

In March 2010, a further attempt to prepare a draft protocol failed. The Working Group meeting in Cali/Columbia was not able to negotiate a final draft, so the meeting was resumed in July 2010¹. Currently, it becomes more and more questionable if a decision on ABS will be possible in Nagoya. Main point of concern is the scope of an ABS regime (NeFo 2010, Gnann et al. 2010): Developing countries call for a broader focus of the ABS protocol. Not only access and benefit sharing from genetic resources should be part of the agreement. They would also like to include benefit sharing from derivates of genetic resources and associated traditional knowledge. There are hardly any chances for most industrialised countries to agree to this; Canada is one of the most opposing countries.

As these negotiations are mainly conducted between political parties, each of which are advised by lawyers, pharmaceutical and other industries or NGOs, it is necessary to point out the scientific relevance of the issue: The ABS mainly focuses on commercial research, esp. bioprospecting by finding useful organic compounds in nature that are isolate, synthesised, patented and developed into products. But as Martinez and Biber-Klemm (2010) point out, ABS also applies to academic research as access to genetic material may be modified. They criticise that academia is not represented adequately in the negotiations and claim for more awareness on national and international level for academic interests. At the same time, they encourage scientists to aim for building trust through transparency regarding research objectives and methods as well as through cooperation with partners in developing countries.

2.2 Renewing CBD's Biodiversity Targets after 2010

The second discourse thread in the update refers to the so called post-2010 process. In 2002 the parties of the CBD agreed "to achieve by 2010 a *significant reduction* of the current rate of biodiversity loss at the global,

As the resumed meeting was held after finishing the update on hand, just a short note on the outcome of the Meeting in Montréal, 10-16 July 2010: Delegates succeeded in negotiating a draft protocol on ABS. Mainly they reached agreement on less controversial provisions. Other more difficult issues were also touched, e.g. the relationship with other instruments and compliance with domestic ABS requirements. Finally, key issues that require further compromises, including scope and the issue of pathogens, derivatives and the concept of utilization of genetic resources, and mechanisms to support compliance were identified. As the outcome did not meet the mandate of the Working Group to suggest a pre-negotiated draft for Nagoya, it was decided to hold another meeting before COP 10, possibly in September 2010 (Jungcurt et al. 2010)

regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth." (COP 6, Decision 26) In short, this was called the "2010 Biodiversity Target". At the same time, the European Council (2001) agreed to *halt* the biodiversity loss in the EU by 2010 – and insofar was more ambitious than the international 2010 Biodiversity Target.

Nevertheless, recent national, European and international reports frequently showed that the biodiversity target was missed. Most prominent is the Global Biodiversity Outlook (CBD 2010). On the European level a similar report was published (EEA 2009). These reports evaluate the (non)progress made with respect to the protection of biodiversity. They conclude that in almost no action field the target or sub-targets are met. Besides others, two main reasons for the failure are (CBD 2010, EEA 2009, European Commission 2010):

- Poor integration of biodiversity into sectoral strategies
- Insufficient knowledge, data gaps, and lack of appropriate indicators

The first reason is pointing towards political failure, but with the second one also scientific failure is indicated.

For renewing the CBD's strategic plan, a draft for Post-2010 targets was presented in May. The advisory body for the CBD recommends the overall aim of halting the biodiversity loss and formulate outcomeoriented targets. Thus, this new goal is even more ambitious than the old one – but it only serves as advice for Nagoya. Similar to the ABS-issue, the prenegotiations were not sufficient. The recommendation stays provisional because a question mark was put on the sustainability of financing the measures. Thus, another important preparation for Nagoya failed as the aim was to have a pre-negotiated draft for the COP-10.

On the European Level, at the beginning of this year the Spanish Presidency started a process for preparing biodiversity targets as a European preparation for Nagoya which has led to a decision by the European Council (2010) in March 2010. In this decision the European Union agrees on a long-term vision that by 2050 biodiversity within the European Union and the ecosystem services it provides - its natural capital - are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human well-being and economic prosperity, so that catastrophic changes caused by the loss of biodiversity are avoided. For this vision to come to life the European Union furthermore agrees on a headline target of halting the loss of biodiversity and the degradation of ecosystem services in the EU, restoring them as far as feasible, while stepping up the EU contribution to averting global biodiversity loss (figure 3).

Post 2010 Targets – European priorities

- Vision
 By 2050, the European Union <u>biodiversity</u> and the <u>ecosystem services</u> they provide its natural capital are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.
 - Headline Target

 By 2020, halting the loss of biodiversity and the degradation of ecosystem services in the EU, restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.



Jpdates | A Lux | 17 June 2010 | 7

Fig. 3: Post 2010 Biodiversity Targets - European priorities

In this context a lot could be said, but two issues should be highlighted: First of all, the vision should become a part of EU 2020 strategy on sustainable development and the Strategy for Growth and Jobs. Currently there seems to be a political mainstreaming of biodiversity – with the risk for biodiversity to be one of many cross-cutting issues but with the chance for integrated, inter-sectoral policy making. Second of all, there are the two tracks: Biodiversity and ecosystem services are part of the policy. Against the background of well known research needs concerning ecosystem services, there is a great need for basic research as well as for advisory service for policy and governments with respect to the implementation (cf Loft/Lux 2010).

2.3 Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services

The third relevant discourse thread is the recent decision on creating an Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IP-BES). The Millennium Ecosystem Assessment called for implementing a mechanism that informs policy making in the field of biodiversity on recent scientific results (MA 2005: 98). IPCC has always been a kind of role model for this policy-science interface. The aim is to provide scientific knowledge for political action on international, regional, national and local level (Larigauderie/Mooney 2010, Anonymous 2010). From 7 to 11 June 2010 a multi-stakeholder meeting in Busan in Korea took place. This meeting of governments and scientific community recommended the United Nations

to establish the IPBES as an advisory body on biodiversity (UNEP 2010, Monfreda et al. 2010). The following recommendations include the functions of the platform:

- The Body should respond to requests from governments that are related to biodiversity and ecosystem services.
- The identification and rating of key scientific information that is needed for policymakers at different levels from local to global. This also means to set impulses for generating new knowledge.
- Existing knowledge on biodiversity and ecosystem services and their interlinkages should be summarised in Assessment Reports. Identifying uncertainties is one issue of these reports. This sounds very similar to the IPCC.
- For supporting policy formulation and implementation, adequate tools and methodologies should be identified. Where necessary, their further development should be encouraged.
- But access to these tools for policy makers is not sufficient. The IPBES should also prioritise needs for capacity building for improving the science-policy interface.
- IPBES should also raise awareness for financing such measures.
- As independent intergovernmental body, IPBES should get administrative support by the UN.

4 Conclusions

The CBD processes are an umbrella or melting pot for the discourse field, but they are not the only driver of the agenda:

- ABS is a negotiation process entailing a large number of conflicting interests occurring between developed and developing countries combined with the substantial influence and engagement of civil society organisations on the one hand and commercial enterprises on the other.
- European Post 2010 Biodiversity Targets are developed mainly in the political sphere, but with some participation of business, environmental organisations and science.
- IPBES originates from the Millennium Ecosystem Assessment and is mainly driven by the scientific community. It should be used by BiK^F for better international visibility.

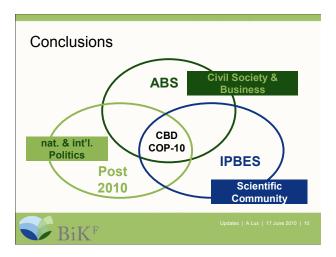


Fig. 4: CBD as melting pot for the discourse field

At a first glance, the issues which are high on the biodiversity agenda cannot be explicitly linked to climate. But especially the discussions on post 2010 targets taking place on the international level are doing exactly that. Progress is made as the recommendations for COP-10 on marine, inland waters, forest and mountain biodiversity and other issues have an explicit climate component (Appelton et al. 2010). Awareness in the political arena for linkages between protected areas, climate change adaptation and mitigation is now greater than two years ago. As the two international conventions on biodiversity and climate aim for equity and sustainable development, attempts for joint processes with United Nations Framework Convention on Climate Change (UNFCCC) are discussed within CBD. But current societal inequalities vary considerably in this two action fields. For example, while in climate politics the question of origin and burden of global warming is an issue, in biodiversity policy access to and use of biological resources is negotiated. Thus, they face different key problems. Some experts worry that these issues are too far apart for a joint political negotiation (Appelton et al. 2010). Political negotiators need a lot of knowledge and advice if climate and biodiversity are negotiated together; competencies they do not have necessarily yet about balancing conflicts between economic activity, use of natural resources and human development. Nevertheless, an advantage of joint efforts in both fields could be a better financial basis as both political issues are faced with finding appropriate financing mechanisms. Thus, complexity is a major challenge here, because developments in biodiversity management do interrelate with climate and vice versa - regardless of joint or separated political processes.

Literature

- Anonymous (2010): Wanted: an IPCC for biodiversity. *Nature* 465(7298): 525
- Appelton, Asheline/ Johannes Gnann/ Elisa Morgera/ Anne Roemer-Mahler/Tanya Rosen, (2010): Summary ot the fourteenth meeting of the subsidiary body on scientific, technical and technological advice to the convention on biological diversity. 10-21 May 2010. *Earth Negotiations Bulletin* 9(514). Online http://www.iisd.ca/download/pdf/enb09514e.pdf (2 Aug 2010)
- CBD Secretariat of the Convention on Biological Diversity (2010): *Global Biodiversity Outlook 3*. Montréal: CBD Online http://www.cbd.int/GB03 (2 Aug 2010)
- EEA (2009): Progress towards the European 2010 biodiversity target. EEA Report 4/2009. Brussels: EEA
- European Commission (2010): *Options for an EU vision and target for biodiversity beyond 2010*. COM(2010) 4 final
- European Council (2001): *Presidency Conclusions* Göteborg, 15 and 16 June 2001. SN 200/1/01 REV 1. Online http://ec.europa.eu/governance/impact/background/docs/goteborg_concl_en.pdf (2 Aug 2010)
- European Council (2010): *Biodiversity*: *Post 2010. EU* and global vision and targets and international ABS regime. Council Conclusions 7536/10. Online http://register.consilium.europa.eu/pdf/en/10/st07/s t07536.en10.pdf (2 Aug 2010)
- Gnann, Johannes/Stefan Jungcurt/Elisa Morgera/
 Nicole Schabus/Elsa Tsioumani (2010): Summary of
 the Ninth Meeting of the Working Group on Access
 and Benefit Sharing of the Convention on Biological Diversity: 22–28 March 2010. *Earth Negotiation Bulletin* 9 (503). Online http://www.iisd.ca/down
 load/pdf/enb09503e.pdf (2 Aug 2010)
- Jahn, Thomas/ Alexandra Lux (2009): Problemorientierte Diskursfeldanalyse neue Methode und Anwendungsmöglichkeiten. ISOE-Studientext Nr. 15. Frankfurt am Main
- Jungcurt, Stefan/Elisa Morgera/Nicole Schabus/Elsa Tsioumani, (2010): Summary of the resumed Ninth Meeting of the Working Group on Access and Benefit Sharing of the Convention on Biological Diversity: 10-16 July 2010. *Earth Negotiation Bulletin* 9 (527). Online http://www.iisd.ca/down load/pdf/enb09527e.pdf (2 Aug 2010)
- Klipstein, Anna (2009): Das Millennium Ecosystem Assessment als Diskursarena im Diskursfeld "Klimabedingte Biodiversitätsveränderungen". ISOE-Materialien Soziale Ökologie, Nr. 29. Frankfurt am Main

- Larigauderie, Anne/Harold A. Mooney (2010): The Intergovnermental science-policy Platform on Biodiversity and Ecosystem Services: moving a step closer to an IPCC-like mechanism for biodiversity. *Current Opinion in Environmental Sustainability* 2(1-2): 9–14
- Loft, Lasse/Alexandra Lux (2010): *Ecosystem Services eine Einführung.* BiK^F Knowledge Flow Paper Nr. 6. Frankfurt am Main: BiK^F
- Lux, Alexandra/Thomas Jahn (2009): *Klimabedingte Veränderungen der Biodiversität. Eine Diskurs- feldanalyse für BiK*^F. BiK^F Knowledge Flow Paper Nr

 3. Frankfurt am Main: BiK^F
- MA Millennium Ecosystem Assessment (2005): *Millennium Ecosystem Assessment Synthesis Report*. Washington D.C.: Island Press
- Martinez, Sylvia/Susette Biber-Klemm (2010): Scientists take action for access to biodiversity.

 Current Opinion in Environmental Science, 2(1-2): 27-33
- Monfreda, Chad/Wangu Mwangi/Tanya Rosen/Liz
 Willetts (2010): A Summary Report of the Third Ad
 Hoc Intergovernmental and Multi-stakeholder
 Meeting on an Intergovernmental Science-Policy
 Interface on Biodiversity and Ecosystem Services
 (IPBES III). IPBES Bulletin 158(11). Online
 http://www.iisd.ca/download/pdf/sd/ymbvol158nu
 m11e.pdf (2 Aug 2010)
- NeFo Netzwerk Forum zur Biodiversitätsforschung Deutschland (2010): *Ergebnisse der 9. Arbeitsgruppensitzung – weiterer Aufschub nach Blockade.* Online: http://www.biodiversity.de/images/stories/N6workshops/9.adhoc-abs-wg-cali_nefo.pdf (2 Aug 2010)
- Rosendal, Kristin (2006): Balancing Access and Benefit Sharing and Legal Protection of Innovations From Bioprospecting: Impacts on Conservation of Biodiversity. *The Journal of Environment Development* 15(4): 428–447
- Siebenhüner, Bernd/Jessica Suplie (2005): Implementing the access and benefit-sharing provisions of the CBD: A case for institutional learning. *Ecological Economics* 53(4): 507–522
- Stiehr, Nina (2009): Die Nationale Strategie zur Biologischen Vielfalt der Bundesregierung als Diskursarena im Diskursfeld "Klimabedingte Veränderungen der Biodiversität". ISOE-Materialien Soziale Ökologie, Nr. 30. Frankfurt am Main



- Sturn, Barbara S. (2009): Die neunte Vertragsstaatenkonferenz des Übereinkommens über die biologische Vielfalt (COP9/CBD) als Diskursarena im Diskursfeld "Klimabedingte Veränderungen der Biodiversität". ISOE-Materialien Soziale Ökologie, Nr. 28. Frankfurt am Main
- UNEP United Nations Development Programme (2010): *Busan outcome*. Third ad hoc Intergovernmental and multi-stakeholder meeting on an intergovernmental science-policy platform on biodiversity and ecosystem services. UNEP/IPBES/3/L.2/Rev.1. Online http://www.ipbes.net/meetings/Documents/ipbes3/K1030396-IPBES-3-L.2Rev1.pdf (2 Aug 2010)

List of cited CBD/COP-Decisions

- COP 5 Decision V/26 (2000): Access to genetic resources [inter alia establishment of an Ad Hoc Open Ended Working Group on Access and Benefit Sharing] Online http://www.cbd.int/decision/cop/?id=7168 (2 Aug 2010)
- COP 6 Decision VI/24 (2002): Access and benefitsharing as related to genetic resources. A. Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization. Online http://www.cbd.int/ decision/cop/?id=7198 (2 Aug 2010)
- COP 6 Decision VI/26 (2002): Strategic Plan for the Convention on Biological Diversity [inter alia commitment to the 2010-Target]. Online http://www.cbd.int/decision/cop/?id=7200 (2 Aug 2010)

Impressum:

LOEWE Biodiversität und Klima Forschungszentrum (BiK^F) Senckenberganlage 25 60325 Frankfurt am Main

V.i.S.d.P.: Dr. Thomas Jahn, Projektbereichsleiter "Wissenstransfer und sozial-ökologische Dimensionen"

ISSN: 2192-1571