

**Technische Universität München**

Lehrstuhl für Wald- und Umweltpolitik  
TUM School of Management

**THE CONVENTION ON BIOLOGICAL DIVERSITY AND NATIONAL  
BIODIVERSITY STRATEGY AND ACTION PLANS IN GERMANY AND JAPAN:  
THE CASE OF INCREMENTAL POLICY CHANGE**

**Asuka Ashida**

Vollständiger Abdruck der von TUM School of Management der Technischen Universität München zur Erlangung des akademischen Grades eines Doktors der Philosophie (Dr. phil.) genehmigten Dissertation.

Vorsitzende: Univ.-Prof. Jutta Roosen, Ph.D.

Prüfer der Dissertation:

1. Univ.-Prof. Dr. Michael Suda
2. apl. Prof. Dr. Karl-Werner Brand

Die Dissertation wurde am 23.10.2013 bei der Technischen Universität München eingereicht und durch TUM School of Management am 15.04.2014 angenommen.



## **Abstract**

The concern about the global biodiversity loss and the degradation of ecosystems gave rise to the Convention on Biological Diversity (CBD) in 1992. With over 190 signatories to the convention, the CBD exists as the single comprehensive international agreement on biodiversity, aiming at the conservation and sustainable use of biodiversity and the access and benefit sharing of genetic resources. Biodiversity, defined as the variability of genetics, species and ecosystems under the CBD, is recognized today as an integral component to achieve sustainable development and has become a key topic in the global environmental politics.

What are the consequences of this international agreement? Available studies are generally critical about the overall results of the CBD. Scholars have identified a number of factors contributing to the ineffectiveness of the CBD. These include the vagueness of the text of the agreement, the lack of scientific and technical advice and the shortage of financial resources for biodiversity conservation. At the same, the current research on the CBD lacks insights in whether gradual and incremental policy changes are taking place at the national level. I argue that the analysis of national implementation as a process over time is crucial in order to understand the consequences of an international environmental agreement. Thus, to address the gap in research on the CBD, I looked into how two countries – Germany and Japan – have implemented the CBD at the national level. My research shows that despite the critical views on the performance of the CBD, incremental national-level policy changes have been triggered due to the implementation of the CBD. The dissertation supports the theory that transformative change in a system can occur through the accumulation of gradual and incremental changes, not only due to abrupt changes and discontinuity. These important underlying changes in the policy system take place over a relatively long time.

The dissertation is based on two in-depth case studies of two CBD signatories: Japan and Germany. These two countries were selected because they are known as to have the “best practice” national biodiversity strategies. Japan was one of first countries to develop a national biodiversity strategy and it is also one of the few countries that

revised the strategy several times. The national biodiversity strategy is also a statutory plan under the Basic Act on Biodiversity of 2008. Germany in contrast was relatively late in developing a strategy. However, its strategy is known for its comprehensiveness. I analyzed the case studies using the Policy Arrangement Approach (PAA) framework, which was developed by Bas Arts and colleagues. The PAA is based on the assumption that a given policy arena is composed of four components: discourse, actors, power and rules. By focusing on these four aspects of a policy arena, I was able to systematically reconstruct the evolution of national biodiversity strategies in the two countries. Based on the analyses, I identified explanatory variables of the policy change and stability, such as the role of intermediaries or hosting international environmental conferences in their own countries.

## Contents

<b>ACKNOWLEDGEMENTS</b> .....	<b>V</b>
<b>ABBREVIATIONS</b> .....	<b>VII</b>
<b>LIST OF TABLES</b> .....	<b>IX</b>
<b>LIST OF FIGURES</b> .....	<b>X</b>
<b>1. INTRODUCTION</b> .....	<b>1</b>
1.1 Setting the scene .....	1
1.2 Structure of the thesis .....	4
<b>2. BIODIVERSITY AS A GLOBAL ENVIRONMENTAL CHALLENGE</b> .....	<b>7</b>
2.1 Biological Diversity (Biodiversity).....	7
2.2 The Convention on Biological Diversity (CBD).....	12
<b>3. ANALYTICAL FRAMEWORK</b> .....	<b>21</b>
3.1 Literature review.....	21
3.2 Operationalization of the research questions.....	34
3.3 Analytical framework.....	36
3.4 Summary .....	47
<b>4. METHODOLOGY</b> .....	<b>49</b>
4.1 Case study and case selection .....	49
4.2 Data collection and analysis.....	51
<b>5. CASE STUDY 1 – GERMANY</b> .....	<b>61</b>
5.1 Background to the case study .....	61
5.2 Policymaking for the Implementation of the CBD (1992 – 2011).....	68
5.3 Application of the Policy Arrangement Approach .....	84
5.4 Analysis and Interim conclusions.....	90
<b>6. CASE STUDY 2 – JAPAN</b> .....	<b>93</b>
6.1 Background to the case study .....	93
6.2 Policymaking for the Implementation of the CBD (1992 – 2011).....	98
6.3 Application of the Policy Arrangement Approach .....	125
6.4 Analysis and Interim conclusions.....	136
<b>7. COMPARATIVE ANALYSIS</b> .....	<b>141</b>
7.1 Implementation of the CBD.....	141
7.2 Explanatory variables.....	150

<b>8. THEORETICAL CONTRIBUTION AND POLICY OUTLOOK.....</b>	<b>153</b>
8.1 Summary of findings .....	153
8.2 Theoretical contribution .....	154
8.3 Outlook and final remarks .....	157
<b>BIBLIOGRAPHY .....</b>	<b>161</b>

## Acknowledgements

Ever since I embarked on my journey towards a doctorate degree, I have often daydreamed of the day I would actually be writing this section of my dissertation... Finally the day has come!

It is a great feeling to be finished and to write this final piece of the grand puzzle. But as it is for all doctorate degrees, I would have never been able to come this far without the support from others. In particular I would like to thank... Professor Dr. Michael Suda, my Doktorvater, who has given me the opportunity to start this journey and guided me over the years as my supervisor; Dr. Olga Malets, my mentor “Doktor-Tante” and a dear friend and colleague, her support and intellectual inspiration have been integral to my PhD journey; Conny, our Lehrstuhl team assistant, who has always been there for me (literally!); and of course my dear colleagues “the WuPi’s” who have been like a family to me! Thank you for all of the enriching conversations and intellectual debates, but also for the fun and memorable times. I must also admit without the 11:30 Lehrstuhl lunches, my German today would not be as good!!

Last but not the least, a special thank you to my family for always being there and giving me a chance like this!

*Vielen Dank and Arigatou!*





## Abbreviations

ABS	Access and Benefit Sharing
BfN	Federal Agency for Nature Conservation ( <i>Bundesamt für Naturschutz</i> )
BMU	Federal Environmental Ministry, Germany ( <i>Bundesministeriums für Umwelt, Naturschutz und Reaktorsicherheit</i> )
BNatSchG	Federal Nature Conservation Act, Germany ( <i>Bundesnaturschutzgesetz</i> )
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on Migratory Species
CHM	Clearing House Mechanism
COP	Conference of Parties
UN CSD	UN Commission on Sustainable Development
EU	European Union
FAO	Food and Agriculture Organization
FUE	Forum for Environment and Development ( <i>Forum Umwelt und Entwicklung</i> )
GEF	Global Environment Facility
GMO	Genetically modified organism
ICNP	Ad-hoc intergovernmental committee for the Nagoya Protocol
IEA	International Environmental Law
IGO	Intergovernmental Organization
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IUCN	International Union for Conservation of Nature and Natural Resources
IUCN-J	Japan Committee for IUCN
ITTA	International Tropical Timber Agreement
LMO	Living modified organisms
MA	Millennium Ecosystem Assessment
MAFF	Ministry of Agriculture, Forestry and Fisheries, Japan
MLITT	Ministry of Land, Infrastructure, Transport and Tourism, Japan
MOE	Ministry of Environment, Japan
MOFA	Ministry of Foreign Affairs, Japan
NBSAPs	National Biodiversity Strategy and Action Plans
NGO	Non-governmental Organization
ODA	Official Development Assistance
PAA	Policy Arrangement Approach
PGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
UBA	Federal Environment Agency, Germany ( <i>Umweltbundesamt</i> )
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNU-IAS	United Nations University – Institute of Advanced Studies
WGRI	Ad hoc open-ended working group on the Review of Implementation of the Convention
WWF	World Wildlife Fund



---

## List of Tables

Table 2.1 International agreements related to the CBD according to scope and objective	18
Table 3.1 Factors influencing the performance and consequences of the CBD .....	33
Table 3.2 Summary of factors and their role in translating an international agreement...	42
Table 4.1 Overview of the type of documents used .....	53
Table 4.2 Overview of the interviews in Germany and Japan according to sector .....	55
Table 4.3 List of interviews in Germany .....	56
Table 4.4 List of interviews in Japan.....	57
Table 4.5 List of participated events for the purpose of observation .....	60
Table 6.1 Species diversity in Japan.....	95
Table 6.2 List of events on the CBD hosted by IUCN-J between 2006 and 2007 .....	116
Table 6.3 Summary of the major CBD/biodiversity related policy documents between 1992 and 2011 .....	124
Table 6.4 The Number of supporters and annual spending of WWF Japan .....	133

## List of Figures

Figure 2.1 Illustration of the concept of “tipping point” .....	11
Figure 2.2 Overview of the governance of the CBD .....	14
Figure 3.1 Parties to the CBD and the number of NBSAPs incl. revisions. ....	24
Figure 3.2 Crossing dualities in social science (discourse-organization, structure-agency) .....	44
Figure 3.3 Visualization of the research framework.....	48
Figure 4.1 Multiple sources and their contribution to the convergence of evidence .....	51
Figure 5.1 Timeline of the first NBSAPs .....	83
Figure 6.1 Timeline of the second National Biodiversity Strategy and Action Plans.....	106
Figure 6.2 Timeline of the third NBSAP.....	114
Figure 6.3 Overview of the Japanese Environmental Law .....	120
Figure 6.4 Development regarding the dimension “Discourse” in Japan.....	127
Figure 6.5 Development regarding the dimension “Actors” in Japan.....	130

# 1. Introduction

## 1.1 SETTING THE SCENE

During the last decades, environmental problems such as acid rain, depletion of the ozone layer and climate change have gained political attention. These environmental problems do not only occur and stay locally, and the causes and consequences often go beyond the national borders. One of the ways to combat these global environmental challenges is to create a system of international environmental agreements (IEAs).<sup>1</sup> The proponents of this approach such as Haas, Keohane and Levy (1993, 4-8) argue that international coordination is required to tackle the global environmental problems. The 1972 Stockholm Conference on the Human Environment is generally considered to have marked the beginning of an international cooperative approach towards dealing with environmental problems (Andresen, Boasson, and Honneland 2012, 1). Since 1972, the number of IEAs has increased rapidly. A database of multinational environmental agreement shows that in the 1990s alone, countries signed over 120 multinational environmental agreements and today there are a total of over 1,100 agreements.<sup>2</sup>

One of these international environmental agreements signed and ratified in the 1990s is the Convention on Biological Diversity (CBD) as a response to the growing concern for global loss in biodiversity and degradation of ecosystem services. The CBD was agreed at the 1992 United Nations Conference on Environment and Development (UNCED), and today it is the single comprehensive international agreement on biodiversity, aiming at “the conservation of biological diversity, the

---

<sup>1</sup> Some authors use the term multilateral environmental agreements interchangeably with international environmental agreements (IEA). In this dissertation, I differentiate the two, because multilateral environmental agreement is a type of an international environmental agreement, but it is not the only type. International environmental agreements can also include bilateral environmental agreements (i.e. agreements between two countries).

<sup>2</sup> For the comprehensive overview of multinational environmental agreements, visit the database by Mitchell (2012).

sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources” (CBD 1992). While there are various definitions of the term biodiversity, the CBD defines it as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (CBD 1992, Article 2). In short, biodiversity is about the variability amongst living organisms that occurs at three levels: genetic, species and ecosystems. The CBD also calls for integrating conservation and sustainable use of biodiversity into relevant sectoral or cross-sectoral plans, programs and policies (CBD 1992, Article 6).

However, agreeing on and ratifying an international environmental agreement only marks the beginning of the journey to combating environmental issues, and studying its consequences is necessary to see whether IEAs are contributing to solving global environmental problems or not. The academic discussions on international environmental agreements over the last years have also been focusing on analyzing the consequences of the IEAs, not just the conceptualization of these agreements.

The starting point of my dissertation is that analysis on changes in the policy system is important in order to determine the consequences of an international environmental agreement. I argue that policy system changes are the key for achieving the goals of the CBD, because when we look at the proposed actions for conserving and sustainably using biodiversity, such as integrating biodiversity issues in relevant sectoral and cross-sectoral plans, programs and policies, they require a change in the how the political and economic system function.

When we turn to research done on institutional change, they show that policy system changes tend take place over long time and seldom occur suddenly. For example, according to Streeck and Thelen (2005), transformative changes in a system occurs through the accumulation of gradual and incremental changes than abrupt changes and discontinuity. Thus, in order to understand the consequences of the CBD, focus should be laid on whether it has induced incremental changes or not.

When it comes to the consequences of an IEA or let alone the CBD, available studies often do not focus on process and policy system changes over time. Available assessments on the consequences of the CBD are mostly snapshots of a given time and they are often critical of the state of biodiversity. According to the recent Global Biodiversity Outlook 3 (2010b), biodiversity loss and unsustainable use of biological resources continue to persist after two decades since the inception of the CBD. Despite the increase in conservation efforts, biodiversity continues to decline and pressures on biodiversity continue to increase globally. The target agreed by the world's Governments in 2002, "to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth," known as the 2010 Biodiversity Target, has also not been met.

There are a number of factors that have been identified to explain why biodiversity loss continue to exist. For example, one argument states that actions to implement the CBD are not taking place at a scale that is required to address the pressures on biodiversity in most areas (CBD Secretariat 2010b, 9). They argue that there is a lack of financial resources to promote conservation and sustainable use of biodiversity conservation when compared to infrastructure and industrial development, or actions to address underlying drivers of biodiversity loss have been limited and there has been insufficient integration of biodiversity issues into broader policies. While the Global Biodiversity Outlook 3 gives a good overview of the global status of biodiversity and which actions are lacking today, it does not tell us whether there has been any changes in the policy system or not.

Analysis on policies and strategies developed to translate the global agreement at the national level as well as the surrounding policy systems over a period of time is an important aspect to determine the consequences of the CBD. I argue that if incremental and gradual changes are taking place in the policy systems since 1992 when the CBD was agreed, there have been positive consequences from the CBD for biodiversity. To see if these changes are taking place, I conducted two case studies on two of the signatories of the CBD, Germany and Japan. Rather than randomly selecting a signatory, I focused on these countries, as they are known to have good

practice national biodiversity strategies. National biodiversity strategies are one of the main instruments to implement the CBD at the national levels.

## 1.2 STRUCTURE OF THE THESIS

In **Chapter 2**, I provide background information on biodiversity and the Convention on Biological Diversity. I presented one of the definitions of biodiversity in this chapter. However, there are more than one definition and understanding of the term. I also explain how and why biodiversity has become a global environmental problem rather than a local issue today. Building on the brief introduction to the Convention on Biological Diversity (CBD) in Chapter 1, I provide a short history of the CBD, including its conceptualization process and its main characteristics, including some of the criticisms on the convention.

In **Chapter 3**, I start with a literature review on the consequences of the CBD. Based on these reviews, I elaborate on the rationale behind my research. After this, I introduce my analytical framework to answer the research questions, *“How have the countries implemented the IEA at the national level, and what are the domestic factors that shape these processes?”* After exploring other approaches, I present my framework which follows the Policy Arrangement Approach (PAA) developed by Arts et al (2006). The PAA is based on the assumption that a policy arena consists of four components: discourse, actors, power and rules, and it allows a systematic reconstruction of a given policy arena.

**Chapter 4** covers the methodology and data collection and analysis of my research. It is also in this chapter that I justify my case selection, Germany and Japan. In **Chapter 5 and 6**, I present my two case studies. I structured both chapters in a similar manner: introduction, the status of biodiversity, biodiversity policy prior to the CBD, and a description of the process of implementation between 1992 and 2011. I then apply the Policy Arrangement Approach, and end the chapter with an interim analysis and conclusion. In **Chapter 7**, I go back to my research questions—*how have the countries implemented the IEA at the national level, and what are the domestic factors that shape these processes?* I compare the two cases and highlight the



similarities as well as differences in terms of the four components as well as factors that contribute to change and stability of the policy arena.

Finally, in **Chapter 8**, I briefly summarize the findings of my research and discuss the theoretical contribution by focusing on the Policy Arrangement Approach as a framework and on the role of international agreements in combating global environmental issues. I end the chapter and this dissertation with an outlook on the CBD.



## 2. Biodiversity as a global environmental challenge

In the first part of this chapter, I introduce the concept of biodiversity, its definition and status, and explain why biodiversity is considered to be a global environmental problem today. I then introduce the Convention on Biological Diversity (CBD), which was adopted in 1992 as the international response to combat the issues surrounding biodiversity. I provide a short history of the CBD, including its conceptualization process, and then its main characteristics.

### 2.1 BIOLOGICAL DIVERSITY (BIODIVERSITY)

#### Definition

During the last decades, biodiversity has become one of the key topics in the global environmental politics. Nonetheless, it is complex and remains as an “under-researched environmental policy area” (Brown 2011, 151). Biodiversity is also a concept without a universally accepted definition and there are many uncertainties surrounding biodiversity. Yet, it has managed to become one of the major global environmental issues today.

The term biodiversity is a relatively new concept in natural science and environmental policy. It is only in the 1980s that the conservation biologists first started to use this term (Haila and Kouki 1994, 6). In short, biodiversity is about the variability of life. It is the variation at *all levels* of biological organisms (Gaston and Spicer 2004, 3). However, there is no universal agreement on variability at which level. For example, biodiversity can be about the genetic level of diversity, species level of diversity or ecosystem level of diversity. Scientifically there is no consensus on the definition of the term biodiversity. To highlight the multitude, a study in the 1990s found over 85 variations of the definition (DeLong 1006 cited in Gaston and Spicer 2004, 3).

Some definitions are used more than others. However, the dominant definitions have also evolved over time. One of the first definitions of biodiversity only included species and genetic levels of diversity (Rosendal and Schei 2012, 119). This definition

started to extend to more than two levels. According to Noss (1990), the most commonly cited definition of biodiversity is provided by the Office of Technology Assessment (1987):

[T]he variety and variability among living organisms and the ecological complexes in which they occur. Diversity can be defined as the number of different items and their relative frequency. For biological diversity, these items are organized at many levels, ranging from complete ecosystems to the chemical structures that are the molecular basis of heredity. Thus, the term encompasses different ecosystems, species, genes, and their relative abundance (Office of Technology Assessment 1987, 3).

This definition describes biodiversity at three levels: ecosystem, species and genetic diversity. The definition of Office of Technology Assessment is broader than the early definitions, which of focused only on species and genetics. Similarly, the CBD defines biodiversity as

The variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (CBD 1992).

This definition often occurs in policy documents, especially when they are in the context of the CBD.

Yet, at the same time, even though the specific, genetic, and ecosystem levels definition of biodiversity are the most commonly cited, not all scientists accept them. Scientists such as Noss (1990, 356) argue biodiversity is not simply about the numbers, but also about the patterns or processes such as the interspecific interactions, natural disturbances and nutrient cycles, as they are crucial to maintaining biodiversity. Ecologists such as Franklin (1993) argue biodiversity must also be considered at the levels of landscapes and region in addition to the levels of genetic, species and ecosystems. Thus, a definition of biodiversity that is comprehensive, fully operational and accepted by different disciplines is not available to this day (Noss 1990, 356). Moreover, Noss (1990, 356) argues that it is

unlikely to be found. Nonetheless, these are debates at the scientific level and at the political level, there seems to be a convergence in the definition of biodiversity, primarily due to the international convention.<sup>3</sup>

In addition to the lack of consensus on the definition, there are still a number of uncertainties surrounding the status of biodiversity. To take biodiversity at the level of species, the exact number existing on this earth remains unknown despite the efforts of taxonomists (See e.g. Sweetlove 2011). The current estimates of total number of eukaryotic species vary largely between 5 million and 30 million (Millennium Ecosystem Assessment 2005a, 90). Despite of these uncertainties in science, there are still scientific as well as political consensus on some of the aspects of biodiversity.

### **The global biodiversity crisis**

Today there is a scientific and political consensus that the extinction of species and decline of biodiversity are taking place at an unprecedented rate (Pimm, Russell, Gittleman, and Brooks 1995). The pressure on biodiversity and ecosystems are increasing and benefits derived from biodiversity are diminishing (CBD Secretariat 2010b, 68–69). To take species diversity, the current species extinction rates are estimated to be between 10 to 100 times the pre-human levels. If all species that are considered “threatened” today were to become extinct, future extinction rates are expected to further accelerate by 10 times (Pimm, Russell, Gittleman, and Brooks 1995).<sup>4</sup> The IUCN Red Lists of Threatened Species that evaluates the status of plant and animal species globally lists 25 percent of 5,501 mammals and 13.30 percent of 10,064 bird species as threatened (IUCN 2012).

Another scientific and political consensus is that the current accelerated biodiversity loss is caused almost exclusively by human activities (UNEP 2007, 121–127;

---

<sup>3</sup> As part of my research, I have listened to and attended a number of presentations and conferences on the topic of biodiversity, both academic and non-academic settings. Majority of them defined biodiversity using the definition provided by the CBD.

<sup>4</sup> According to May et al. (1995), the extinction rate of the pre-human levels for mammals and birds based on the fossil record was one species lost every 500 to 1,000 years.

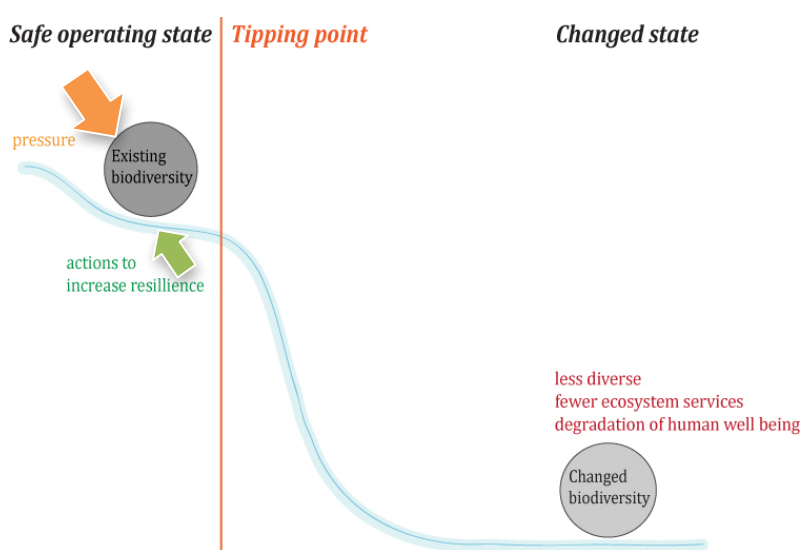
Millennium Ecosystem Assessment 2005a, 96). According to the Millennium Ecosystem Assessment (MA) that assessed “the consequences of ecosystem change for human well-being and the scientific basis for action needed to enhance the conservation and sustainable use of those systems and their contribution to human well-being” (Millennium Ecosystem Assessment 2005c), humans have altered the ecosystems more rapidly and extensively than ever during the last five decades. This has resulted in a substantial and fundamentally irreversible loss in the diversity of life in many parts of the world (Millennium Ecosystem Assessment 2005c).

The driving forces behind the accelerated loss of biodiversity are multitude of complex and intertwining factors, yet all caused by human activities one way or another. Habitat change or land use change (e.g. for agriculture, palm oil plantation) is considered to have the most impact on biodiversity. This is followed by factors such as habitat fragmentation, introduction of alien species, and overexploitation and unsustainable use of resources (Millennium Ecosystem Assessment 2005a, 96). Other driving forces include air, soil and water pollution, excessive use of nutrients and climate change (CBD Secretariat 2010b, 55; Millennium Ecosystem Assessment 2005a, 96).

Scientists and policymakers are also concerned that biodiversity loss can trigger larger impacts on the earth system if the earth system surpasses a certain threshold. Once a system is pushed beyond the tipping point, it may collapse and transform into a distinctly different state. Once the earth system begins to enter the changed state, it would be difficult and expensive to control the changes as there are fewer ecosystem services and human well-being would be degraded. In most cases, this process is irreversible.

Current science cannot predict when these tipping points would occur with enough precision even at the local level (CBD Secretariat 2010b, 72). As human well-being is dependent on ecosystems and biodiversity, when an abrupt and potentially irreversible shifts occur, it can be extremely difficult for our societies to adapt (CBD Secretariat 2010b, 71–72).

These changes affect all societies directly or indirectly, in particular the communities who tend to rely most directly on the surrounding environments. Human well-being is safeguarded by biodiversity and ecosystem services, such as food security, health, energy security, provision of clean water (Millennium Ecosystem Assessment 2005b, 30–33). Human economic activities such as fisheries, farming, and tourism are also dependent on biodiversity and ecosystem services. Thus, the issue of the accelerated loss of biodiversity is not only an ecological issue, as it is closely linked to our social and economic activities.



**Figure 2.1 Illustration of the concept of “tipping point”**  
Source: Global Biodiversity Outlook, CBD Secretariat (2010b, 72)

The causes of the loss of biodiversity are not only found locally, but can also come from outside of the national borders. Many ecosystems can exist in more than one country or region. For example, the Wadden Sea, one of the last natural large-scale intertidal ecosystems in the world, comprises the Dutch conservation area and German national parks. Furthermore many of the drivers for biodiversity loss are global, e.g. climate change and air pollution. With globalization, our social and economic activities are interconnected beyond the national border. Thus, the issues surrounding biodiversity are not only a local or national matter, but also a global environmental issue.

## 2.2 THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD)

### Conceptualization of the Convention

To combat the local as well as global issues surrounding biodiversity, the Convention on Biological Diversity (CBD) has existed since 1992. The CBD was signed at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992.

The CBD is not the first convention on the topic of biodiversity at the international level. International agreements on the protection of different species and specific areas have been implemented for over a century. The Yellowstone National Park was established in 1872 to protect a certain area, and the first international convention for conservation of nature, London Convention for the Protection of Wild Animals, Birds and Fish in Africa, was signed in 1900 to preserve wildlife. Prior to the CBD, there were four particularly important global conventions concerning biodiversity:

- The Convention on International Trade on Endangered Species of Wild Fauna and Flora of 1973, known as the CITES;
- The Convention on the Conservation of Migratory Species of Wild Animals of 1979, known as the CMS;
- The Convention concerning the Protection of World Cultural and Natural Heritage of 1972, known as the Paris Convention;
- The Convention on Wetlands of International Importance, Especially as Waterfowl Habitat of 1971, known as the Ramsar Convention

The CITES (1973) aimed specifically at trade, the CMS (1979) specifically targeted migratory species, the Paris Convention (1972) covered cultural and natural heritages, and the Ramsar Convention (1971) focused specifically on wetland. According to McGraw (2002b, 20), approximately thirty percent of the existing multinational environmental agreements concern biodiversity either in full or in part. However, as the four agreements show, the majority of the existing international agreements have the goal to protect specific species or sites, or to control certain human activities. There are more comprehensive international agreements on nature conservation such as the Bern Convention on the Conservation of European Wildlife and Natural Habitats of 1979, which covers the protection of natural habitats and



endangered species including migratory species. However, the Bern Convention and European agreement do not offer global coverage.

The conceptualization of a global biodiversity convention started in the early 1980s within the framework of the International Union for Conservation of Nature (IUCN), the oldest and the largest global environmental network with over 1,000 government and NGO member organizations around the world. At the 16<sup>th</sup> IUCN General Assembly in 1985, the Resolution 16/24 was adopted, which called on the Director General to draft “a global agreement on the conservation of the world's wild genetic resources.” This resolution became the basis for the drafting the CBD (McGraw 2002b, 12).

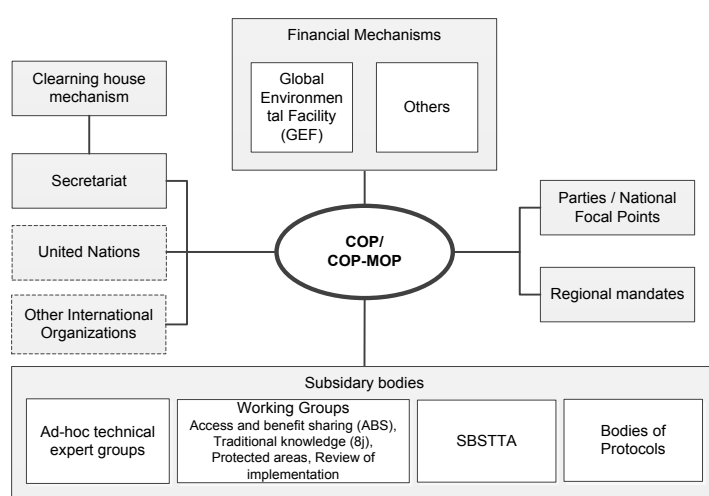
Subsequently, the IUCN Environmental Law Center prepared the first draft of a global agreement, which was circulated among governments and NGOs for feedback. With this effort, the UN Environmental Program (UNEP) as well as other states started to show interest in an international agreement on biodiversity (McGraw 2002b, 12–13). Followed by the pre-negotiation meetings in 1987, the formal negotiation of the CBD took place over ten intergovernmental meetings between 1988 and 1992 (McGraw 2002b, 13–20). Finally, the CBD was signed at UNCED in 1992 alongside two other international agreements – United Nations Framework Convention on Climate Change (UNFCCC) and Agenda 21, a non-binding action plan for achieving sustainable development. It entered into force on 29 December 1993 (McGraw 2002b, 13–20; Johnston 1997).

The original idea of the CBD was an international agreement that would “put some order into disparate agreements regarding the protection of wildlife” (Le Prestre 2002c, 1). The initial intent was to develop an umbrella convention that would absorb existing agreements on biodiversity - in other words, to create a retroactive treaty. Nonetheless, the CBD resulted in a framework convention, which does not supersede but builds upon existing treaties (McGraw 2002a, 18–23).

### **Governance of the CBD**

The CBD is not merely an agreement on nature conservation, but there is a governance structure built around the agreement. The Conference of Parties (COP)

<sup>5</sup>exists as the central governance body, which meets every two years or as needed as defined in Article 23. The COP reviews the implementation status of the CBD, adopts programs of work and provides policy guidance. The COP is supported by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) following Article 25. The SBSTTA consists of government representatives, observers from the non-Party governments, scientific community and other relevant organizations. It is in charge of providing technical recommendations to the COP.



**Figure 2.2 Overview of the governance of the CBD**

There are a number of other subsidiary bodies in forms of Working Groups, which have been convened by the COP to provide recommendations. There are several working groups within the CBD governance structure: Working Groups include: Working Group on Access and Benefit-Sharing (ABS); Working Group on Article 8(j) (traditional knowledge); Working Group on Protected Areas; Working Group on the Review of Implementation of the Convention (WGRI); and the Open-ended Ad Hoc Intergovernmental Committee (ICNP) for the Nagoya Protocol on ABS (CBD Secretariat 2012a).

<sup>5</sup> Conference of Parties (COP) exist in other international agreements such as UNFCCC, unless otherwise stated, in this dissertation COP exclusively refers only to that of the CBD.

The Secretariat of the CBD located in Montreal, Canada provides assistance and administrative support for the COP as well as the other subsidiary bodies. It also acts as a coordinator between the CBD and other relevant international bodies (CBD 1992 Article 24, Article 40). These include other UN bodies or Secretariats of other international environmental agreements such as UN Framework Convention on Climate Change (UNFCCC). The Secretariat prepares, organizes and documents for all of the meetings of these bodies (Siebenhüner 2006, 264). It compiles the National Reports<sup>6</sup> from Parties and creates synthesis reports and other information on the status of implementation. The Secretariat is linked to the United Nations Environmental Programme (UNEP) (McGraw 2002a, 20).

The Secretariat also acts as an information hub through the Clearing-House Mechanisms (CHM) (CBD 1992 Article 17). The CHM is an internet-based network, promoting technical and scientific cooperation as well as the exchange of information between signatories (CBD Secretariat 2012b).

In terms of financial mechanisms, the CBD has a multilateral fund to assist the implementation in developing countries financially (CBD 1992 Article 21, Article 39).

---

<sup>6</sup> National Reports is a mechanism of the CBD, which contains “information on measures taken for the implementation of the Convention and the effectiveness of these measures,” as defined by the Article 26 (CBD Secretariat, n.d.-b). Since 1992, parties have been called upon to submit five national reports. These reports have guidelines from the COP regarding the content: First National Report focused on the implementation of Article 6 (due January 1998); Second National Report was a questionnaire that revealed the level of implementation (due May 2001); Third National Report was built on the Second National Report and included additional questions on strategic objectives and goals established under the Strategic Plan of the CBD. The Parties could provide information on the experience of implementing NBSAPs, and facilitate the identification of obstacles to implementation (due May 2005); Fourth National Report, which was a report on the national implementation of the Convention. It was mostly in descriptive format accompanied by a concise narrative reporting with tables, figures or graphics (due March 2009); Fifth National Report focuses on measuring the progress towards the Aichi Biodiversity Targets (due March 2014).

An effective system of national reports can aid the COP to:

- Consider the lessons learned by Parties in the implementation of the Convention
- Identify gaps in capacity for policy research and analysis at the national, regional and global levels, including technical and financial requirements
- Formulate appropriate requests and guidance to Parties and to its subsidiary bodies, the Secretariat, the financial mechanism, and other organizations with expertise relevant to the implementation of the Convention (CBD Secretariat, n.d.-b).

However, the CBD does not operate the funds by itself. The responsibility lies in the hands of the UN Global Environmental Facility (GEF) (McGraw 2002a, 20).

Aside from the National Reports, the National Biodiversity Strategy and Action Plans (NBSAPs) are the main instrument for implementing the Convention (CBD Secretariat 2011c). Developing NBSAPs is also one of the few obligations for the Parties under the CBD<sup>7</sup>.

A national biodiversity strategy should convey how a signatory intends to fulfill the objectives of the Convention, and the subsequent action plan should outline the steps to implement the national biodiversity strategy. As signatories are responsible for biodiversity within the sphere of influence, both the strategy and action plan should be written in the light of each Party's circumstances, natural as well as socio-economic and political environments.

### **The scope of the CBD**

The scope of the CBD is different from previous international environmental agreements related to biodiversity. It is comprehensive but also broad. The CBD covers multiple issues as shown in Table 2.1 (page 19). Even though this broad scope was not the original idea, it extended during the negotiation rounds and the CBD is the most comprehensive agreement on the topic of biodiversity at the global level (McGraw 2002a, 23). The issues covered in CBD are not only about accelerated loss of biodiversity and nature conservation. Within the context of modern technology surrounding genetically modified organisms (GMOs) and intellectual property rights, there is the question of who should have the right to access biological resources, and if and how the benefits derived from the exploitation of the genetic resources and

---

<sup>7</sup> Article 6 states, "Each Contracting Party shall, in accordance with its particular conditions and capabilities: (a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and (b) integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies".

biotechnology should be shared. In other words, the CBD focuses on how access and benefit sharing (ABS) of biological resources should be regulated.

Thus, the three aims of the CBD are: (1) the conservation of biological diversity, (2) the sustainable use of its components and (3) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (CBD 1992, Article 1). The CBD is an international environmental agreement, but as the aims show, it is not only about the environment but also about the socio-economic aspects of biodiversity as well as ethics and equity. With this wider focus, the topics that are covered in the CBD range from conservation to economy and trade. Furthermore, the CBD also covers the aspect of development together with conservation. Under the CBD, biodiversity is placed in a broader context and the CBD is a comprehensive and inclusive agreement for conservation.

Furthermore, the CBD has a broader focus than preexisting international agreements by taking the ecosystem approach. Ecosystem approach considers humans as an integral part of the earth system and the CBD recognizes the value of all components of biodiversity how they work together to create an ecosystem (Rosendal and Schei 2012, 126). Previous treaties related to biodiversity targeted specific species (e.g. CMS), sites (e.g. World Heritage Convention; Ramsar Convention) or activities (e.g. CITES). Ecosystem approach refers to the “strategy for the integrated management of land, water, and living resources that promotes conservation and sustainable use in an equitable way” (CBD Secretariat 2010a).

**Table 2.1 International agreements related to the CBD according to scope and objective**  
(After McGraw 2002, 22 with minor modification)

Scope	Environment	←----->	----->	Economy and trade
Objective focus	Conservation	Sustainable use/ Development	Benefit sharing	Other
1970s- 1980s	CITES (1973) CMS (1979) Ramsar (1971) World Heritage (1972) UNCLOS (1982)	CITES (1973) ITTA (1983)	FAO International Undertaking on PGRFA UNCLOS Deep Seabed Mining	Montreal Protocol (1987) Basel Convention on Long-Range Transboundary Air pollution (1989) Ship pollution (1973)
1990s	CBD (1992) UNCLOS (fish stocks) (1994) ICRI (1994)	CBD (1992) ITTA (1994) UNFCCC (1992) UNCCD (1994) UNCLOS (fish stocks) (1994)	CBD (1992) Revised integrated pollution prevention and control (IPPC)	Kyoto Protocol (1997) WTO trade related intellectual property (TRIPs) Basel Protocol (1999) Rotterdam Convention (1998)
2000 and beyond	Potential protocols under CBD	Potential protocols under CBD	International Treaty on PGRFA (2001) Nagoya protocol (2010) under CBD	Cartagena Protocol (2000) under CBD Stockholm Convention (2001) Nagoya-Kuala Lumpur supplementary protocol (2010) under CBD

The CBD is generally praised for its normative importance. For example, the UN Commission on Sustainable Development (CSD) referred the CBD to as “the first truly and for the moment the foremost sustainable development treaty”(UN Commission on Sustainable Development 1997). The CBD aims to conserve the environment but does not development and considers the question of equity. An international law expert, Tinker (1995) also regarded the CBD as one of the new generation of international legal instruments that seek to bring together the development imperatives of the developing countries and the environmental demands of the industrial countries.<sup>8</sup> Birnie et al. (2009) argue that the CBD has brought significant changes to international environmental law based on its recognition of the intrinsic value of biodiversity as well as other values related to biodiversity such as ecological,

<sup>8</sup> The interests of the developing countries are reflected in texts such as the preamble recognizing the “special needs of developing countries” for “new and additional financial resources” and appropriate access to relevant technologies.

genetic, socio-economic, scientific, educational, cultural, recreational or aesthetic values. (Birnie, Boyle, and Redgwell 2009, 190–204). Furthermore, the CBD legally established that the conservation of biodiversity is a common concern of humankind (Birnie, Boyle, and Redgwell 2009, 190–204).





### **3. Analytical framework**

This chapter begins with providing an overview of what available texts say about the consequences of the CBD. I identify what is lacking in the body of literature today to meet the objective of my research. In the second part of the chapter, I introduce my analytical framework, which largely follows the Policy Arrangement Approach (PAA) developed by Arts et al (2006). In this section, I also outline the justification of my choice.

#### **3.1 LITERATURE REVIEW**

##### **Approaches to analyze the consequences of an IEA**

Over the years, scholars introduced a number approaches to analyze the consequences and operations of international environmental agreements (IEAs) (Victor, Raustiala, and Skolnikoff 1998; Brown Weiss and Jacobson 1998; Young 1999). In particular, regime theory scholars have contributed to the information and analysis on the consequences and operations of IEAs. A regime refers to the “institutions possessing norms, decisions, rules and procedures which facilitate a convergence of expectations” (Krasner 1983, 2). Regime theorists analyze IEAs as a form of institutions consisting of norms, decisions, rules and procedures. Today consequences of an IEA are mainly studied in terms of compliance, effectiveness and implementation at the international level.

Compliance refers to the “state of conformity or identity between an actor’s behavior and a specified rule” (Raustiala and Slaughter 2002, 539). This concept looks at whether or not the Parties have met the formal goals of the IEA. It is also an assessment at a given time. Similar to compliance, effectiveness is an assessment of an IEA at a given time. However, effectiveness is concerned with the magnitude and impact of the agreement as opposed to the conformity to the agreement. Effectiveness is a multi-dimensional concept and it can be analyzed in various dimensions, e.g. the effectiveness in attaining the goals, solving the targeted problem, or behavioral change of the Parties (Young 1994, 140–160). Defining effectiveness is

crucial because the results of the effectiveness can be different depending on what is at stake. For example, treaty can be effective in achieving the stated goal, but the same treaty can remain ineffective in solving the actual problems (Young 1994, 140–160). Furthermore, Underdal et al (2002) assess the effectiveness of an IEA in terms of relative improvements on the environment based on these two conditions: (a) the absence of an international regime and (b) the collective optimum.

Implementation differentiates itself from effectiveness and compliance because it is an analysis that occurs over a period of time (Joachim, Reinalda, and Verbeek 2008, 6–7) and it is a continuous process. In an influential public policy study, Mazmanian and Sabatier define implementation of a domestic policy as the following:

[T]hose events and activities that occur after the issuing of authoritative public policy directives, which include both the effort to administer and the substantive impacts on people and events (Mazmanian and Sabatier 1983, 4).

In other words, implementation refers to the process of translating what has been decided. This could be in forms of policies or laws at the national level. Furthermore, unlike compliance and effectiveness, implementation is part of a larger sequence in a policy cycle. According to scholars who follow the stagists approach such as Lasswell (1951) that divides policy processes into steps and stages, implementation is one of the stages. Implementation of an IEA is multi-dimensional concept and it can take place in at least two different levels: at the international level and the level of contracting parties (which is primarily at national levels or regional levels). Implementation at the international level can be forms of negotiation on decisions or protocols amongst others<sup>9</sup>. Implementation at the contracting parties or regional level can be in forms of e.g. national (regional) policies, laws and actions.

Compliance, effectiveness and implementation are different concepts, but they are also related to one another. Implementation is often crucial towards compliance because Parties implement the international agreement to meet the requirements of

---

<sup>9</sup> For a more comprehensive list see Le Prestre (2002b, 74).

the international agreement<sup>10</sup>. Complying with the agreement is often a key for effectively meeting the goals set by the international agreement<sup>11</sup>. Effectiveness and implementation are also often related. According to literature, implementation at the Party level (national or regional<sup>12</sup>) can be an important determinant for the overall effectiveness of an international agreement (Young 1999, 279; Ferraro 2010, 38–39).

Having these definitions in mind, I look into the consequences of the CBD in terms of compliance, effectiveness and implementation.

### **Consequences of the CBD**

#### *Compliance and effectiveness*

Although compliance has often been used to analyze the consequences of other IEAs, for the CBD this approach has limited value. The CBD contains limited obligatory clauses in the text. With the exception of the 2010 Biodiversity Targets, the CBD has not developed any clear targets during the last two decades. Recently in 2010, Parties agreed on the Aichi Biodiversity Targets, which consists of twenty targets until 2020 based on the five strategic goals of the CBD (CBD Secretariat 2013). However, they are not binding and also too early to assess the degree of compliance. One of the few obligatory clauses under the original text of the CBD is to develop a national

---

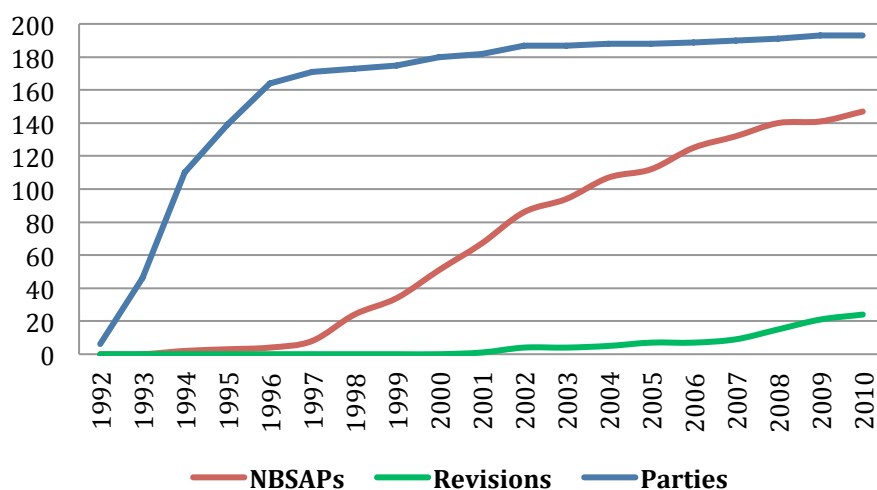
<sup>10</sup> However, there are always exceptions. For example, it is possible to comply with an international agreement without any implementation at the Party level. In other words, a Party to the international agreement can meet the goals of the agreement without taking any action (Raustiala and Slaughter 2002, 539). This happens when the international environmental agreement is in line with existing practices or existing practices go beyond what is asked in the international agreement. A concrete example of such as case was the Swedish compliance to the Baltic Sea accords (Victor, Raustiala, and Skolnikoff 1998, 659). Sweden's existing practice meant automatic compliance to the agreement without any extra implementation effort. In other cases, a country can comply with an agreement through actions unrelated to the agreement. For example, the economic collapse in the former Soviet Union had an impact on their compliance with a number of environmental agreements (Roginko 1998, 618).

<sup>11</sup> I state "often" because there are always expectations. For example, there is a case where Parties complied with a treaty to end the use of a particular pollutant, but this in turn caused a total increase in pollution by encouraging the use of substitutes (Brown Weiss and Jacobson 1998, 5).

<sup>12</sup> Most of the time the Parties to the convention are nation states. However, the European Union is a signatory to some of the international agreements, including the CBD.

biodiversity strategy and action plans (Article 6). The Secretariat of the CBD currently tracks the status of the strategies at the global level. In 2011, 173 of out of the 193 signatories<sup>13</sup> have developed a NBSAPs or equivalent instruments (See Figure 3.1).

The degree of compliance to the CBD only informs us of the tip of the iceberg regarding the consequences of the CBD. By focusing on compliance, I cannot explain whether incremental changes are taking place or not. A closer look to the national strategies is also necessary. Previous research shows that the quality of the strategies can greatly vary between countries (Prip, Johnston, and Vierros 2010). This means the sole development of a national biodiversity strategy tells us little about the true consequences of the CBD.



**Figure 3.1 Parties to the CBD and the number of NBSAPs incl. revisions.**  
(Based on data derived from CBD Secretariat (n.d.))

In terms of effectiveness, there are studies on the CBD effectiveness on goal attainment and problem solving. However, the results of the effectiveness assessment are not positive. For example, the Parties to the CBD have additionally committed themselves to “to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to

<sup>13</sup> 193 signatories means almost all countries are part of the CBD. The EU is also a separate signatory to this agreement. However, to this day the United States of America (US) is not a signatory to the CBD.

poverty alleviation and to the benefit of all life on Earth.” This policy is known as the 2010 Biodiversity Target (CBD Secretariat 2011a). The most recent review on the status of biodiversity concluded that there are a number of indications of continuing decline in biodiversity in terms of genetics, species and ecosystems. For example, species that have been identified as “extinction risk” are on average moving closer to extinction. The idea of identifying certain species as being at risk is to prevent them from going extinct, but this appears to be not as effective. A great majority of natural habitats around the world continue to decrease, although there has been progress in slowing the rate of loss for some of the tropical forests and mangroves (CBD Secretariat 2010b). Others such as Le Prestre (2002b, 70) argue that the CBD has also not been able to play a meaningful role in the resolution of biodiversity crises (e.g. forest fires and coral bleaching). In terms of behavior change, effectiveness is also considered low by scholars such as McGraw (2002a) and Rosendal and Schei (2012). Rosendal and Schei’s (2012) research found out that the CBD has had limited impact on the state’s actual practices.

Available studies have not only assessed effectiveness of the CBD but also explored the factors that are causing the ineffectiveness<sup>14</sup>. Some researchers argue that the weakness of the CBD lies in the convention text. Morgera and Tsioumani (2011, 1) describe the text of the CBD as vague and qualitative, with a lot of loopholes. By bringing in the non-traditional issues of biodiversity such as equity on the table, the CBD is a courageous political document but at the same time, the end result is a “clumsy and cumbersome” legal text (McGraw 2002a, 23). While these observations

---

<sup>14</sup> In this section, I clustered the factors that were identified to be contributing to the ineffectiveness of the CBD following the model presented by Brown Weiss and Jacobson. Brown Weiss Jacobson’s (1998) research shows that there are eight factors under characteristics of an agreement that can have an impact. These are: perceived equity of the obligations (the states must feel that obligations imposed are equitable); precision of the obligations (the more precise the easier to assess and promote compliance); provisions for obtaining scientific and technical advice; reporting requirements (as environmental agreements often deal with highly technical subjects, such provisions ensure that there is a broad consensus among the parties on the scientific and technical issues); provisions for forms of monitoring such as regular reports as well as what happens to those reports; role of the Secretariat (can utilize the reports to clarify the obligations under the accords, or provide systematic analyses); and incentives (tools that give countries financial or other assistance to help them comply) or sanctions (type of coercive action) (Brown Weiss and Jacobson 1998, 523–528).

on the texts of the CBD is true, I argue that how the text is written is not the only factor that determines the consequences of an international agreement. It is possible that there are actors that help to interpret the vague texts and put them into the national and local contexts.

In terms of the characteristics of the activities involved, one criticism is that the scope of the CBD is too broad (Le Prestre 2002a, 70) and there is a lack of prioritization in the agenda setting of the CBD (Morgera and Tsioumani 2011, 1). Furthermore, provisions for obtaining scientific and technical advice in the current structure is limited under the CBD. The Subsidiary Body on Scientific Technical and Technological Advice (SBSTTA), which was originally intended to provide meaningful and timely scientific guidance, failed to do so, and instead of an independent scientific body, the SBSTTA is referred to as a mini-COP for being highly political (McGraw 2002a, 20). Thus, the CBD has been left without an independent scientific body, and critics argue that the lack of timely scientific guidance is contributing to the ineffectiveness of the CBD (e.g. Koetz, Bridgewater, van den Hove, and Siebenhüner 2008; Loreau et al. 2006). While I do not disagree with the importance of timely independent scientific guidance at the international level, I argue that policy changes at the national level could still be taking place independent of the scientific bodies<sup>15</sup>.

There are others who argue that the CBD's governance and the review and compliance mechanisms are the factors that contribute to the ineffectiveness of the CBD. The COP does not review individual National Reports, let alone the national strategies. The COP today only makes decisions based on the Secretariat's syntheses of the reports such as the Syntheses of National Reports and Reporting mechanisms<sup>16</sup>.

---

<sup>15</sup> To address the lack of an independent scientific body for the CBD, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was founded in 2012 during my research. It aims to bridge the gap between science and policy to halt biodiversity loss and degradation of ecosystem services. With IPBES, the international community hopes to obtain meaningful and timely scientific guidance, which SBSTTA failed to do. At the time of this dissertation, the contribution of IPBES to the CBD's performance was too early to be determined.

<sup>16</sup> Other syntheses of the reports are available through CBD Secretariat under <http://www.cbd.int/reports/syntheses.shtml>.

Pittoch argues that the global syntheses of the CBD lack detail (Pittock 2010, 362–363). Furthermore, these syntheses have a tendency to focus on the submission rate of the national reports and on a quantitative analysis of legislative developments (such as the percentage of parties with biodiversity legislation in place) (Morgera and Tsioumani 2011, 6). The weakness of the current review structure of the CBD lies in the fact that not only it lacks detail but cannot act as “name, shame and praise.” Other international environmental agreements such as the Ramsar Convention on Wetlands and the United Nations Framework Convention on Climate Change (UNFCCC) have these mechanisms in place through their review structure. The Ramsar Convention produces detailed global and regional synthesis of the national reports. It names and praises the leading countries. The UNFCCC’s syntheses of national communications consists of detailed analyses as well as a comparison of emission-reduction measures by industry sector of the Annex I countries (Pittock 2010, 362–363). This means the lagers and frontrunners are named and either shamed or praised.

On the other hand, the CBD’s reviews present general trends and best practices of the implementation of the CBD, but does not have a comparative element. The Working Group of the Review of the Implementation of the Convention (WGRI) has been established since 2004 to review the implementation of the CBD; however, in terms of monitoring compliance of the parties, there was not necessarily an added-value (Morgera and Tsioumani 2011, 4, 6). The group focused on streamlining the processes within the CBD and ensuring cooperation between the CBD and other international or national non-state actors (Morgera and Tsioumani 2011, 6). Thus, there is a lack of qualitative analyses of the content of the national reports, of the quality and comprehensiveness of national legislation or of the achievement of the CBD objectives (Morgera and Tsioumani 2011, 6). I also concur that these mechanisms at the international level can contribute to the overall effectiveness, but moreover, I argue that the general lack of qualitative analyses on the implementation at the national level needs to be addressed to assess the overall consequences of the CBD.

In addition, there are scholars such as Jones-Walter and Mulder (2009), Ring et al. (2010), and Balmford et al. (2002) who argue that there needs to be an economic

incentive for states to act upon halting biodiversity loss. They argue that the ineffectiveness of the CBD is due to the lack (monetary) value on biodiversity and ecosystem services and emphasize the importance of the economic valuation of biodiversity<sup>17</sup> (Jones-Walters and Mulder 2009; Ring, Hansjürgens, Elmqvist, Wittmer, and Sukhdev 2010; e.g. Balmford et al. 2002).

In addition to these factors, Underdal et al (2002) argue that main explanatory factor of the effectiveness of an IEA is connected to the nature of the problem. The malignity of the problem is dependent on several criteria: presence or degree of deep-seated political conflicts, incongruity, asymmetries and uncertainty or disputes in sciences (Andresen, Boasson, and Honneland 2012, 8–9). On the contrary, a perfectly benign problem would have identical preferences amongst the states and the further the situation goes away from harmony would the problem malignity increase. This is however theoretical and less likely to occur in international environmental politics.

Biodiversity is often referred to as a typically malignant issue (Andresen, Boasson, and Honneland 2012, 9). There is an asymmetry in the distribution of biodiversity globally and biodiversity tend to be concentrated in developing countries<sup>18</sup>. There are deep-seated political conflicts between the North and the South, and so far, there is no political as well as scientific agreement on how to divide the costs, funding mechanisms or the necessary actions to conserve the world's biodiversity. In particular, the issue of access and benefit sharing arising from genetic resources is where the developing and industrial countries divide continue to exist. The dilemma of biodiversity is described as the follows: the potentially profitable natural or genetic resources are primarily located in developing countries and large economic players who take advantage of them come from industrial countries and therefore

---

<sup>17</sup> The most recent international initiative to address the economic value of ecosystem was the Economics of Ecosystem and Biodiversity (TEEB), which was completed in 2010. The idea of TEEB comes from the Stern Review of the economic costs of climate change (see Stern 2006), which presented a powerful economic case for timely action on climate change (Ring, Hansjürgens, Elmqvist, Wittmer, and Sukhdev 2010). Whether and how the TEEB influences the overall performance of the CBD is still early to conclude at this stage.

<sup>18</sup> For example, one of the biodiversity hotspots is tropical forests. Most of the tropical forests exist in less developed countries or emerging economies.



the benefit sharing from biological resources are unequally shared (Brown 2011, 151). While “the nature of the problem” approach is useful to understand why the problems addressed under the CBD are malign, I argue that it does not mean national level implementation, where international politics do not necessary come into play, is equally ineffective.

Last but not the least, previous research such as the one from Brown Weiss and Jacobson (1998, 528) show that the surrounding international environment of an international agreement can also have an impact on the consequences of a international environmental agreement.<sup>19</sup> International environment can also change over time. Uncontrollable social or economic changes at the international can also take place and these could have an impact on the implementation of and compliance with an IEA at the national levels (Brown Weiss and Jacobson 1998, 528–529). For example, in Brown Weiss and Jacobson’s case studies, they observed that the international conferences such as the UNCED created international momentum and it acted as a stimulus for the media worldwide to mobilize, national and international non-governmental organizations (NGOs) to be encouraged, and public awareness on environmental issues to increase. The NGOs together with the global media and public opinion exerted pressure to the states to take action.

Available research on the international environmental surrounding the CBD states it has been less favorable. McGraw and Le Prestre argue that there has been a lack of political support and public visibility of the issues surrounding biodiversity in comparison to other environmental issues (McGraw 2002a, 23; Le Prestre 2002a, 70). However, these analyses must be taken with caution, since they are only from the early 2000s and international environment can change over time. It is possible that

---

<sup>19</sup> Brown Weiss and Jacobson describe that in the 1970s and 1980s, a number of key international developments related to the environment took place. Starting with the Stockholm Conference in 1972, followed by the report of the World Commission on Environment and Development, *Our Common Future*, in 1987 and the UNCED took place in Rio de Janeiro in 1992. Their research showed that the UNCED in particular improved the implementation and compliance with existing international environmental agreements in the 1980s and early 1992 (Brown Weiss and Jacobson 1998, 528).

the analyses on the international environment of the CBD today yield different results.

#### *Implementation at the international level*

When we look at the implementation of the CBD at the international level, there were a number of developments during the two decades. International agreements do not often change once they are signed. However, in the case of the CBD, obligations can extend through protocols<sup>20</sup>, because it is a framework convention. A protocol must always be negotiated independently, and its clauses only apply to those who have become Parties to the specific protocol (McGraw 2002a, 18–19). In the case of the CBD, many of the most controversial issues, such as technology transfer and access and benefit sharing, remained unresolved in the text of 1992. Thus, the post-agreement negotiations were expected to clarify these points (McGraw 2002a, 25). Over the last two decades, the COP to the CBD developed two binding protocols: the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit Sharing (See Table 2.1, Page 20).

During the earlier years of the existence of the CBD, the COP adopted the Cartagena Protocol in 2000 at the first Extraordinary meeting of the COP (EXCOP1) and went into force in 2003. The Cartagena Protocol establishes rules for trade in genetically modified organisms (GMOs) and reinforces the rights of the countries to restrict the import of the GMOs on environmental or health grounds. It provides guidance and assistance especially to the developing countries that lack the capacity to enact and implement certain domestic rules on the GMOs. Nonetheless, as a result of the negotiations, the protocol did not agree to establish a global standard to judge the impact of the GMOs (Falkner and Gupta 2004, 2–3; Falkner 2000).

In contrast to the Cartagena Protocol that was adopted quickly, the protocol on access to genetic resources and benefit sharing took nearly twenty years to agree. The Nagoya Protocol of 2010 aims to operationalize the third objective of the CBD by

---

<sup>20</sup> A protocol is an international agreement and it is a separate but related agreement to the original agreement.

establishing rules and procedures on access, benefit sharing and compliance (Morgera and Tsioumani 2011, 11). Nagoya Protocol has not entered into force due to the lack of ratifications; it would only enter into effect when fifty of the 193 signatories to the CBD separately ratify the Nagoya Protocol (CBD Secretariat 2012).

In addition to the development of the Protocols, during the last twenty years, the COP has adopted guidelines and principles for implementation. The programs of work are one of the main instruments of the CBD to achieve the agreed commitment goals. They offer guidelines for national implementation of the CBD and also identify tasks needed to implement the CBD at the international level as well as prospects for collaboration with other international instruments or processes (Morgera and Tsioumani 2011, 21). These guidelines and principles for implementation are an integral part of the CBD functioning today.

Nonetheless, even after the adoption of these two Protocols, some of the key issues remain unresolved. In addition, the increasing number of guidelines and principles is adding to the complexity of the CBD. According to Morgera and Tsioumani, “The evolution in the convention’s interpretation and the overall coherence of the various instruments adopted by the COP have been obscured (...) by the convoluted, repetitious, and disorderly drafting of the CBD COP decisions” (Morgera and Tsioumani 2011, 5). The complexity of the CBD continues to pose challenges for the national policy-makers, who are responsible for the implementation, as well as negotiators who are involved in connecting the CBD to the IEAs (McGraw 2002a; Morgera and Tsioumani 2011). Thus, there seems to be a gap between the national and international levels. With the increasing complexity of the CBD, actors who can navigate between the international and national levels would become important. These actors can follow and understand the complex implementation of the CBD at the international level and communicate back to the national level policy actors.

#### *Implementation at the national level*

Previous studies on IEAs such as from Brown Weiss and Jacobson (1998, 530) also show that factors within a country play an important role for the overall performance

and consequence of an international agreement.<sup>21</sup> Similarly, Young (1999), Underdal and Hanf (2000), and Haas, Keohane and Levy (1993) indicate that national implementation is one of the key factors that influence the overall performance of an international environmental agreement. Despite this argumentation, in comparison to the implementation at the international level, literature covering the implementation of the CBD at the national level is limited. Although there are some research on specific countries e.g. Ethiopia (Rosendal 2000) and Madagascar (Hufty and Muttenger 2002), these reports are over a decade old. The implementation of the CBD at the national level remains under investigated. There are other studies such as Morgera and Tsioumani and Le Prestre, but these remain high level.

Nonetheless, these studies have also identified factors that are impeding implementation at the national levels. Morgera and Tsioumani (2011, 1) describe that national and local authorities who implement the CBD on the ground often work in isolation to the developments at the international level and this is contributing to the problems with implementation. Other scholars such as Le Prestre (2002c) identified factors such as lack of capacity or lack of financial resources as contributing to the problems with implementation. These high level analyses do not focus on the implementation as a process and therefore policy changes that occur at the national level remains under investigated.

In Table 3.1, I summarize the literature review in terms of the identified factors affecting the effectiveness, compliance or the implementation of the CBD at the international and national levels.

---

<sup>21</sup> According to Brown Weiss and Jacobson's research on implementation, the difference between eight countries on the same international environmental agreement was greater than the difference between the five international environmental agreements signed by the same country (Brown Weiss and Jacobson 1998, 530).

**Table 3.1 Factors influencing the performance and consequences of the CBD  
(Based on literature review)**

		<b>Factors identified in literature on the CBD (Listed in chronological order)</b>
Characteristics of the activities involved	(Lack of) economic incentives / (Lack of) economic valuation	Balmford et al. (2002) Jones-Walters and Mulder (2009) Ring et al. (2010)
Characteristics of the agreement	(Lack of) Perceived equity of the obligations	Andresen, Boasson, and Honneland (2012)
	(Lack of) Precision of the text, incl. obligations (Lack of) prioritization	Le Prestre (2002b) McGraw (2002a) Morgera and Tsioumani (2011)
	(Lack of) Provisions for obtaining scientific and technical advice	Loreau et al. (2006) McGraw (2002a) Koetz et al. (2008)
	(Lack of) reporting and monitoring implementation	Pittock (2010) Morgera and Tsioumani (2011)
	(Lack of) incentives and sanctions	Pittock (2010) Morgera and Tsioumani (2011)
International environment	(Lack of) link to other IEAs	Le Prestre (2002b) Pittock (2010)
	(Lack of) political support and public visibility via e.g. worldwide media/public opinion	Le Prestre (2002a) McGraw (2002a)
Factors involving a country	(Lack of) financial resources (in developing countries)	Le Prestre (2002b)
	(Lack of) Capacity (in developing countries)	Le Prestre (2002c)
Nature of the problem	Biodiversity is a malign problem	Andresen, Boasson, and Honneland (2012)

### 3.2 OPERATIONALIZATION OF THE RESEARCH QUESTIONS

To sum up, my literature review shows a number of studies have assessed the overall performance of the CBD during the last two decades. Most of these assessments are based on compliance and effectiveness and therefore are based on a snapshot of the CBD at a given time. The CBD calls for change in political and economic system by integrating biodiversity in all relevant sectoral and cross-sectoral policies, and the necessary changes in the policy system may take a long time, be gradual and incremental than abrupt. Therefore, I argue that available research on the CBD cannot analyze the full picture of the consequences of the CBD.

Implementation studies are about processes, and the analysis on implementation can indicate whether the processes are heading towards the goal attainment of the international agreement. IEAs must ultimately affect national policy development in order to be successful in protecting the environment or combating global environmental issues. Thus, by focusing on the national level implementation, I would be able to make conclusive remarks on the overall performance of the CBD. Yet, this type of analysis is not sufficiently covered in available studies.

In order to observe if underlying changes to the policy system are taking place at the national level, I focus on implementation of the CBD. The research question of this dissertation is therefore as follows: *How have the countries implemented the IEA at the national level?* I subsequently identify the factors that impede or facilitate policy changes. Based on Streeck and Thelen's (2005, 28–29) theory that transformative changes in a system occurs through the accumulation of gradual and incremental changes than abrupt changes and discontinuity, I argue that an analysis of international environmental agreements requires over an extended period of time.

#### **National Biodiversity Strategy and Action Plans**

In order to stay focused and to be able to carry out a comparative analysis, I study one specific national policy output known as *the national biodiversity strategies and*

*action plans (NBSAPs)* for the purpose of this dissertation<sup>22</sup>. National policies are not the only actual practices of the IEA or the final stage of implementation<sup>23</sup>, but they are, as an implementation scholar Rosendal puts, “activities that move in the right direction” (Rosendal 2000, 16). Thus, implementation in this research focuses on the process of translating the CBD (international environmental agreement) into national biodiversity strategy and action plans (NBSAPs).

I argue that the NBSAPs are a good subject to focus on because it is one of the principal instruments of the CBD. Similar to other instruments of the CBD, the instructions from the international level on the NBSAPs also remain abstract and vague. The international guidance on how to develop NBSAPs had been limited to the generalized COP decisions (Morgera and Tsioumani 2011, 7).<sup>24</sup> This means that the operationalization of the clauses remains in the hands of each signatory (Prip, Johnston, and Vierros 2010). Thus, analysis on the NBSAPs shows how countries

---

<sup>22</sup> The objectives of the CBD are broad and due to this characteristic, there are a number of different instruments for implementation. These include for example creating networks of protected areas (CBD 1992, Article 8) and educating the public on biodiversity (CBD 1992, Article 13). Parties have a lot of room for interpretation when translating the concepts into actual practices. This makes the CBD a flexible instrument, but this also means that policy outputs of the CBD can often vary across countries. Rather than studying everything, this dissertation focuses on one of the key policy instruments, the national biodiversity strategy and action plans.

<sup>23</sup> According to Rosendal, implementation can also be studied in terms of policy outcome and policy impact in addition to policy output. Output refers to ratification of the agreement, development of new or adjusting existing national legislations and institutions. Outcome is about enforcement of policies leading to corresponding behavior change in target groups. Impact is about the actual solving of environmental problems (Rosendal 2000, 15). In my research I specifically focus on the policy output.

<sup>24</sup> In 2009 and 2010, there were developments at the international level surrounding the NBSAPs, specifically aimed to tackle the vagueness and abstractness of the international guidance. For example, a series of regional and sub-regional capacity-building workshops took place between 2006 and 2009. These workshops were organized to reinforce the national capacities for the development, implementation, review and updating of NBSAPs, and for the integration of biodiversity considerations into relevant national policies, strategies and planning processes. Another series of capacity-building workshops for NBSAPs is currently planned with the funding from the Japanese government in 2010. Furthermore, the new strategic plan of the CBD adopted in 2010 attempts “to serve as the framework and main guidance for the revision, updating and implementation of the NBSAPs and also points to the CBD programmes of work as key tools for updating NBSAPs” (Morgera and Tsioumani 2011, 6). I will take the recent developments are expected to become important factors in shaping the future of the NBSAPs; however, my analysis is primarily on the period till 2010. Thus, although I will have these developments in the background, they will be not the main focus of this thesis.

translate the CBD requirements into an actual policy and strategy at the national level.

Although the NBSAPs are one of the central instruments of the CBD, apart from some regional case studies on NBSAPs such as the one for the Asia-Pacific region by IUCN in 2002<sup>25</sup>, there have been limited studies on the national biodiversity strategies. It was only in 2010 that the United Nations University – Institute of Advanced Studies (UNU-IAS) published the first comprehensive assessment on all existing NBSAPs. Prip et al. looked into the development, implementation and revision of the strategies, and assessed the effectiveness of NBSAPs as tools for national implementation of the Convention (Prip, Johnston, and Vierros 2010). This work provides in-depth information about the overall status of the NBSAPs and identifies the challenges faced at the national level such as integrating biodiversity in sectoral and cross-sectoral policies. Nonetheless, the dynamics behind the policy processes are not their focus, and do not answer my research questions.

### **3.3 ANALYTICAL FRAMEWORK**

In the following section I present an overview of literature from implementation studies on international agreements and sociology, and in particular, studies that focus on how translating global norms into local and national context. I argue that research that focus on translating global norms to local and national context also have relevance for my study, because the existing research on the CBD often states there is a gap between what has been agreed upon at the international level and what takes place at the national level. Furthermore, I turn to domestic policy studies because national biodiversity strategies and their related policy documents can be approached as domestic policies. Building on the literature review I present my analytical framework, which is based on the Policy Arrangement Approach developed by Arts et al.

---

<sup>25</sup> Carew-Reid, J, ed. (2002) is an IUCN study that reviews the national biodiversity strategy and action plans of fifteen Asian countries.



### Actors and power

One approach to analyze is to focus on the actors in a policy domain and their relative power. Policymaking for a long time has been primarily an exclusive task of the government. However, this has evolved during the last decades to include non-state actors and networks between various actors. These new non-state actors, such as NGOs or citizen groups, and networks in policymaking have started to co-determine policy processes and policy outcomes together with the government (Arts and Tatenhove 2004, 339–340).

Following these developments in policymaking, academic debates first focused on *the actors* involved in the process. For example, the concepts of policy networks and policy communities grew out of the theoretical debates in the 1970s and 1980s in relation to the discussion on governance and relationship between state and civil society (Coleman and Perl 1999, 693). The analyses on the actors include the identification of the degree and pattern of integration of the state and non-state actors, as well as how public *power* is shared between the two actors (Coleman and Perl 1999, 694).

Similarly regime scholars such as Victor et al (1998) and Underdal and Hanf (2000) have also focused on the role of NGOs in the domestic implementation process. Victor et al (1998) study how the NGOs influence the policy outputs and conclude that the participation of the environmental NGOs and other public interest NGOs affect policy *outputs* and, in general, policies resulted in a more demanding environmental policies due to their participation.

According to Joachim, Reinalda and Verbeek (2008, 6–7) political dynamics at the national level are often different from those at the international levels. Some groups can be more active at the domestic level e.g. states in federal systems can be part of the process at the domestic level but may not be as active at the international level (Le Prestre 2002b, 96–97). Implementation phase at the national level can also give actors an opportunity to restart political battles of the issues at stake. Puchala (1975, 495) named this phenomenon as ‘post-decisional politics.’ In post-decisional politics, those who are dissatisfied with the internationally agreed policy may use the

implementation phase to change the content and challenge the already agreed policies.

Underdal and Hanf (2000)'s research<sup>26</sup> also shows the importance of domestic actors and in particular the role NGOs place in increasing societal demand and support for environmental policies. They argue the variation in the implementation of the same international agreements across national governments can be explained through the societal demand or support (e.g. through NGOs and green parties) and the governmental supply or capacity (such as funds, personnel, leadership) at the national level (Underdal and Hanf 2000, 58–75; 353–377). The importance of resources (power) of the state in policy processes is also highlighted in their study.

Similarly Brown Weiss and Jacobson (1998) identify a number of domestic factors that influence domestic and national implementation of the international environmental agreements, including domestic actors as well as their capacities. In particular they observe that the administrative capacity (of the state officials), leadership (of the individual actors), NGOs and their knowledge and information related to the IEA have direct impact on the implementation (Brown Weiss and Jacobson 1998, 535). Underdal and Hanf (2000) also argue that the IEA implementation 'failure' and 'success' are not also only a matter of 'will' of the state, or deliberate choice, of a state. Instead, they argue that it is more dependent on the ability of states and their capacity to govern (Underdal and Hanf 2000, 15). This is also in line with findings from Hass et al. (1993), who argue that the *capacity building* is necessary to improve the effectiveness of the environmental treaties.

---

<sup>26</sup> Underdal and Hanf tested the validity of the following three models to explain which factors are important for the implementation of international agreements. The first model –the *Unitary Rational Actor* model –looks at the state as rational actors and links the negotiating positions and implementation to costs and benefit considerations as well as the *nature of the problem* (Underdal and Hanf 2000, 51–58; 343–352). The second model –*Social Learning and Policy Diffusion* model - looks at the transnational flows and exchanges of knowledge and ideas (Underdal and Hanf 2000, 75–78; 377–378). The third model –*Domestic Politics* model - focuses on the multiple dynamics taking place in the policy field (Underdal and Hanf 2000, 376–377).

Underdal and Hanf argue that actors and their capacity to govern are not only relevant to developing countries but also to advanced industrial countries. Important role of actors and leaders and their capacity to implement of the IEA at the national and local levels are captured in a number of recent research from various countries (e.g. Ferraro 2010; Honneland and Jorgensen 2003; Joachim, Reinalda, and Verbeek 2008, 186–187). These research show that focusing on actors and their capacity are key to understand implementation of international agreements at the national level.

Nonetheless, not only international relations and regime theorists have made contribution to this field. When we turn to anthropology and sociology research, they show the important role of actors as intermediaries between the international and national levels. In particular research done by Merry and Malets are relevant. Merry (2006) explores how different actors translate global norms associated with human rights and gender violence into practices in societies and communities where human rights are non-existent as a concept and where gender violence is not defined as a human rights violation. Malets (2009) analyzes the translation of global norms of sustainable forestry management into specific local practices. At the local level, many global requirements appear unfamiliar and are difficult to implement. In both cases, the authors observe that skillful activists, who navigate between different levels of the governance system, employ local institutions and practices as a resource and facilitate the translation of global norms (Malets 2009; Merry 2006). Although these two studies are not directly related to biodiversity or the CBD, they show that the translators of global rules contribute to the institutionalization of the rules, even in instances where significant gaps between global rules and national contexts exist. This observation is in contrast to the *misfit and fit* argument of European Union (EU) policy implementation studies from Knill and Lenshow (1998) that is based on the

assumption that institutions are resistant to change and existing institutional structures determine the implementation path.<sup>27</sup>

### **Rules and boundaries**

Another approach is to focus on the rules and boundaries of the policy system. In addition to actors and their capacities, policy science scholars began identifying possible factors that can explain the degree and pattern of integration of state and non-state actors in policymaking. One of these factors was boundary of a policy system, and they looked into how boundaries determine membership in policy and whether the strictness of the nature of boundaries had an impact on the integration of state and civil society. According to Coleman and Perl (1999), policy boundary is dependent on several factors: the level of openness of the community, size of the community, degree of internationalization of the community, interaction among members within the community, membership stability and structure of information exchange between the members (Coleman and Perl 1999, 695). However, there are also other theories. Jenkin-Smith and Sabatier (1993) argue that boundaries of inclusion are not rigid and are loose. They argue that shared beliefs, values and norms (regarding policy goals or causal links and other perceptions) form the basis of their fundamental policy positions and strategies (Sabatier and Jenkins-Smith 1993, 4). Nonetheless both approaches see the importance of boundaries in a policy system.

---

<sup>27</sup> Knill and Lenschow argue that a state's willingness to act on an EU policy is dependent on their 'goodness of fit' with domestic institutions. In other words, the more compatible the EU policies are with the political and societal arrangements at the national level, the more likely governments will carry out the necessary changes. The adjustment costs are anticipated to be minimal. In cases where there is a greater discrepancy between the EU policies and the national conditions, the misfit-ness increases the likelihood of the government resisting and failing to implement (Knill and Lenschow 1998). Streeck and Thelen (2005) have also challenged the misfit and fit thesis, and instead they argue that the "the enactment of social rules is never perfect" and "there is always a gap between the ideal pattern of a rule and the real pattern of life under it" (Streeck and Thelen 2005, 14). Streeck and Thelen argue that imperfect enactment is the main source of institutional change. Vogel argues similarly. Vogel analyzed the process of liberalization in Japan. Although Japan has been described to often deviate from established rules immediately causes costly side effects or painful social sanctions or both, but Vogel's analysis showed that Japan did not "impede change but also condition it" (Vogel, S (2005) ctd in Streeck and Thelen 2005, 29).

For institutional scholars such as North (1990) and Ostrom (1990), the *rules (or institutions)* are also important determinants. Rules are different from boundaries, although they can also determine the membership in policy communities. They are also what shape the interaction between the actors. Rules can determine the participation of a certain actor in decision-making as well as the role actors could play in the process (Veenman, Liefferink, and Arts 2009, 203). These two approaches show that rules as well as boundaries are key determinants of a policy system.

### **Discourse**

According to social constructivists, discourse is an important aspect to consider when analyzing a policy domain, particularly when it involves environmental issues (Dryzek 2005; Hajer 1995). Discourse refers to “a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities” (Hajer 1995, 44). This means how a problem is framed and defined determines whether an environmental phenomenon appears to be a problem or an issue. Some scholars such as Foucault (1970) argue that the existence of a hegemonic discourse (e.g. Foucault 1970), while others argue such as Dryzek (1996, 103) argue that there can be more than one dominant discourse in a given society. Nonetheless previous research shows that discourse should be considered when analyzing a policy system.

In Table 3.2, I summarized the elements and factors that have been the focus of previous studies in an overview. Although I categorized previous research into actors, power and resource, rules and discourse separately, recent studies tend to analyze more than one element in their research. For example, the recent approaches to analyze discourse do not only focus on the discourse itself, but their analyses also includes actors and their power, e.g. Hajer (1995) and Dryzek (2005, 1996). Discourse scholars such as Dryzek (1996, 103) also argue that the ideas and discourses do not exist independently from the societal system.

After conducting literature review, I argue that each element constitutes an important part of analyzing and understanding a policy system. Therefore I decided to I use a framework that could capture all discourse, actors and their capacities,

rules, and boundaries. While most of the scholars focus on one or two of these elements, Arts et al (2006)'s Policy Arrangement Approach looks at all of them.

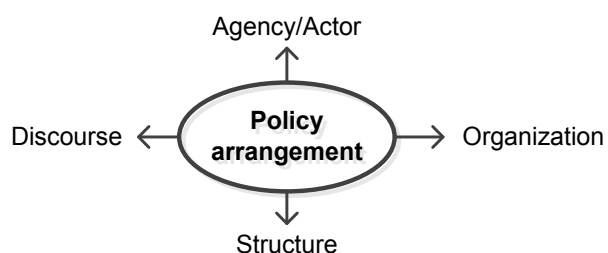
**Table 3.2 Summary of factors and their role in translating an international agreement**

Factors identified in literature		Identified role	Source
Actors	Governmental and non-governmental, all involved in the process	-	Coleman and Perl (1999), Arts et al (2006)
	NGOs	Influence on the policy outputs	Brown Weiss and Jacobson (1998), Victor et al(1998)
		Contribute to creating societal demand and support on the issue	Underdal and Hanf (2000)
	Intermediaries	Translate global norms into specific local practices	Merry (2006), Malets (2009)
Power and resource	Leadership and resources governmental actors	Determine the power and influence as well as political acceptance of the actors	Brown Weiss and Jacobson (1998), Underdal and Hanf (2000), Arts et al (2006)
	Resources of NGOs	Determine the power and influence as well as political acceptance of the actors	Arts et al (2006)
	Administrative capacity	-	Brown Weiss and Jacobson (1998)
	Knowledge and information	Determine the power and influence as well as political acceptance of the actors	Brown Weiss and Jacobson (1998), Arts et al (2006)
Rules	Formal and informal rules	Determine the membership of actors involved in the process and how they interact with each other	North (1990), Ostrom (1990), Arts et al (2006)
Discourse	Norms and values; Definitions of problems; Perceived solution	Reflect the understanding of the issue	Dryzek (1996), Hajer (1995), Arts et al (2006)

### Policy Arrangement Approach

According to Arts et al (2006) all four dimensions –actors, power, rules and discourse –together form policy arrangements. A policy arrangement is “the way in which a certain policy domain is temporarily shaped in terms of discourses, actors, resources and rules” (Arts and Buizer 2009, 343). For Arts et al. a policy domain is not static but it is constantly evolving. Actors, power, rules and discourses are also often interwoven and each strand tends to have an impact on the other elements involved (Arts and Leroy 2006, 45).

Policy Arrangement Approach (PAA) developed by Arts et al. (2006) is a holistic framework to study a given policy arena, by focusing on the four dimensions. They argue that the framework is suitable for identifying institutional patterns of *change* and *stability* in the mid-term as well as the mechanisms behind the change and stability. The PAA is based on two main assumptions: first, that the day-to-day processes and interactions between agencies gradually form relatively stable patterns (Arts and Leroy 2006, 13). The second assumption demonstrates that policy arrangements are not only the result of a strategic behavior but reflect long-term contextual societal and political trends and processes (Arts and Leroy 2006, 13). Thus, the PAA aims to capture discourse, beliefs, formal and informal rules, as role of actors and organizational structures, which are often analyzed separately in academic debates. What is more, the PAA considers continued analysis, thus suited for analysis on over a longer period.



**Figure 3.2 Crossing dualities in social science (discourse-organization, structure-agency)**

Source: Leroy and Arts (2006: 8) with minor changes

In this framework, *discourse* entails the analysis of the norms and values as well as the definitions of problems. Approaches to solutions of the problem at stake also form part of the discourse. Under the dimension of actors, the analysis is focused on those involved in the policy and their coalitions (including opposition). The rules of the game are about the formal procedures as well as informal rules and ‘routines’ of interactions between actors. Under the dimension of power, the analysis is focused on the resources of the actors as they lead to differences in power and influence (Arts and Leroy 2006, 13–14). The dimensions, actors, rules of the game, and power (resources) refer to the *organizational* aspects of the policy arrangement.

The PAA by no means bridges all existing approaches in environmental policy analysis. It is rather an attempt to create a dialogue between them by capturing theoretical and methodological richness that exists in the field. It is an encompassing and dynamic analysis of policy processes (Arts and Leroy 2006, 45). Through the analysis of the four dimensions, the PAA is a framework that allows a systematically reconstruction of a policy arena, including the process of translation into actual practices. There has been a number of studies that used the PAA framework for environmental issues e.g. Arts and Buizer (2009) on global forest governance, and Stassen, Smolders and Leroy (2013) on Flanders’ environmental health approach between 1970s and 1990s. They have successfully deconstructed the given policy arenas.



### **Explanatory factors**

The four dimensions of the PAA, discourse, actors, their power and rules of the game, are also the determinant of change and/or stability of the policy system (Arts and Leroy 2006). However, the PAA framework, itself, does not provide a proposition on when and how any of the dimensions change or remain stable. The PAA alone is not sufficient in answering my research questions. Therefore, I reviewed another set of literature on potential explanatory variables that could be relevant for my research. Literature review indicates that there are several factors that can influence the four dimensions and ultimately implementation of an IEA at the national level.

#### *National and local contexts*

Brown Weiss and Jacobson's (1998) study shows indirect factors that affect implementation of the international environmental agreement through their influence on the "direct" factors such as the characteristics of the agreement and activity involved. These include: country's history and culture, behavior on the subject in the past, existing legislation and regulations related to the activity (Brown Weiss and Jacobson 1998, 534). For the case of Germany, a study from Steuer and Martinuzzi (2005, 461) concludes the single most important condition for a high-level political coordination was political will for the development of national sustainable development strategy. Their research indicates that it possible that certain factors that are more important one country than in another country.

#### *International conferences*

The CBD is an international agreement but it also has biennial meetings known as the COP and there are other related conferences and events. According to literature, international conferences are one of the factors that have an impact on actors within a policy system. In particular they contribute to the rise of NGOs. Friedman, Hochsteler and Clark (2005) show that through convening large thematic international conferences, the international governmental organizations (IGOs) have provided a focal point for stimulating the growth of new NGOs. Similarly, according to Reimann (2009) who studied the activists of Japan, international conferences and

meetings prompt nation-wide networks and coalitions of NGOs promoting international sustainable development policies in Japan (Reimann 2009, 140–141).

Furthermore, Reimann's study shows that when a country hosts an international event, this is an additional factor that stimulates new national mobilization efforts. It inspires activists in other part of the country to organize their own activities and event or even to form new national networks surrounding those issues (Reimann 2009, 141–142). Within the context of development NGOs, international conferences, especially the ones held in Japan, created a special opportunity for NGOs to bring in international norms and created a kind of external pressure known as "gaiatsu" to convince the government to implement changes that would improve the domestic political opportunity structures. These research indicate that analysis of the CBD should not only be on the agreement but also the surrounding conferences and events.

#### *Policy window*

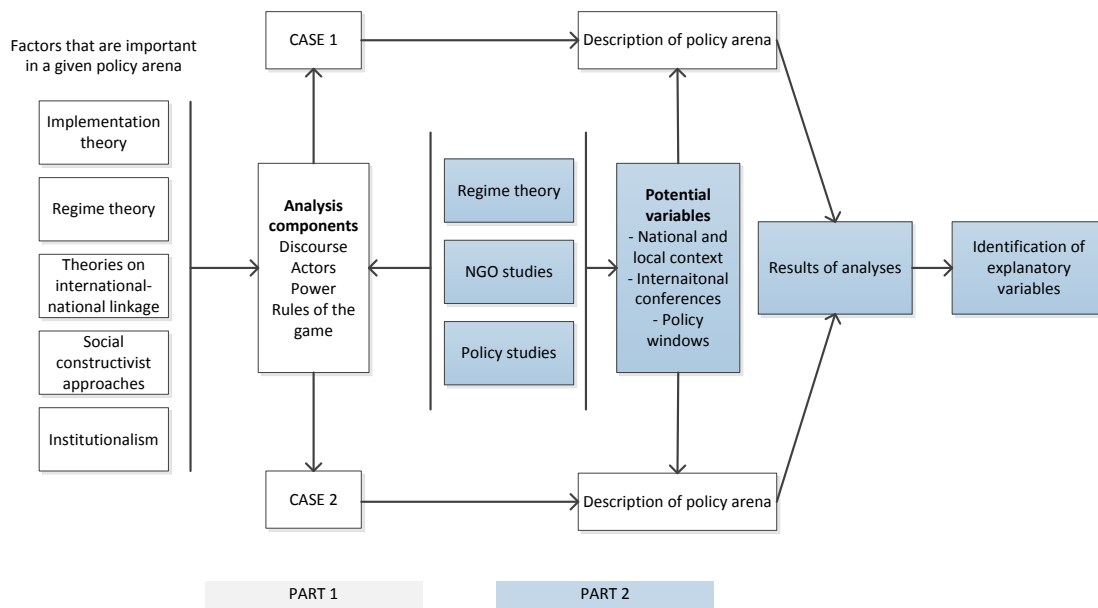
My research is based on the assumption that changes in a policy system are more gradual and incremental than sudden. Nonetheless, the speed of change does not necessarily have to be constant. When I turn to policy studies literature, the concept of "policy window" or "opportunity window" is often cited as a trigger for change. One of the main proponents of this concept, Kingdon, defines policy window as a critical temporary advantageous choice opportunity for certain actors to bring the issues on the political agenda (Kingdon 1984, 212–213). Policy window can open both unpredictably (e.g. earthquake) and predictably (annual budget allocation) (Kingdon 1984, 213). Victor et al (1998) too argue that uncontrollable social and/or economic changes can have impact on the implementation of an international agreement (Victor, Raustiala, and Skolnikoff 1998, 681). For my research, policy window or even lack of it could be a possible explanatory variable for change and stability.

### 3.4 SUMMARY

The overall analytical framework for this research is based on the two sets of literature review I presented in the previous sections. Through the first set of literature review, I identified which factors should be considered for the analyzing a policy arena over a longer period of time. Reviewing various approaches, I argue that the PAA framework developed by Arts et al (2006), which have discourse, actors, power and rules as main elements of analysis, is most appropriate for my research to study the process of implementation of the CBD at the national levels.

In the second set of literature review, I reviewed factors that have been identified to bring change (or stability) into a policy area that could also be relevant for my research. These include context of the countries, international events, and policy windows/policy opportunity that creates a temporary advantageous window i.e. a chance to bring a certain agenda forward. My research does not aim to test specific theories, but rather open-ended to allow myself to explore factors that may not have been identified or considered as important in other studies.

Because I can systematically reconstruct a policy issue by using the Policy Arrangement Approach, there was no need for an additional analytical framework to identify the factors that influence the implementation at the national levels.



**Figure 3.3 Visualization of the research framework**

Divided into part 1 (description of a policy arena) and part 2 (identification of explanatory variables)

---

## 4. Methodology

### 4.1 CASE STUDY AND CASE SELECTION

#### Case study as a methodology

In order to answer the research questions and to fill the gaps in current research presented in the previous chapters, I use the case study approach, because this approach has advantages in comparison to other research strategies such as experiments or surveys for my research.

A case study is, “[A]n empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin 2003, 13). According to Verschueren and Doorewaard (2005), case studies as methodology are particularly useful when a researcher tries to gain a profound insight into one or several processes restricted in time and space. This is because case studies are based on qualitative analysis and focus on depth rather than breadth unlike a survey (Verschuren and Doorewaard 2005, 146,149; 163–171). Furthermore, the case study method allows myself to obtain an overall picture of the research object. It also requires less pre-structuring when compared to a survey or an experiment and gives me some flexibility during the process. This aspect of case study is particularly important for this thesis, because the implementation process of the CBD at the national level is an under-research area. Considering all of this, a case study approach became the most appropriate choice.

#### Case selection: Germany and Japan

In this dissertation, I focus on two Parties to the CBD, Germany and Japan. They were not selected at random but because of certain characteristics identified during the first screening. Both of their policy documents related to the CBD are perceived to be best practices, yet were reluctant to take action for implementation in the early 1990s. Back in early 1990s, both Germany and Japan argued that existing national legal framework was sufficient to implement the CBD at the national level (Gettkant,

Simonis, and Suplie 1997; Japanese Diet 1993c). Today, the two countries have NBSAPs that are often featured as best practices by the CBD.

Japan quickly developed a NBSAP in 1995 and revised the strategy twice in 2002 and in 2007. With each strategy, the Japanese government engaged more stakeholders in the process and increased transparency, aligned the efforts to international developments. There are a number of concrete goals and (quantitative) indicators. Recently, the strategy has gained the status of a statutory plan through the Basic Law on Biodiversity (2008). At the international level, very few countries have revised the strategy more than once, or have had their Cabinet adopt the strategy and give a legally defined position of the NBSAPs. At the time of case selection for this research in 2010, there were only 29 countries out of 171 CBD Parties that have development and revised their national biodiversity strategy and action plans once and six countries that have revised twice.<sup>28</sup>

Germany on the other hand has not revised their strategy once and only developed their NBSAPs in 2007. Nonetheless, Germany has one of the most comprehensive strategies with over 330 concrete goals and 430 indicators, most of which are quantitative, concrete and time-bound. It is often referred to a comprehensive and ambitious strategy. According to Prip et al. (2010, 88), of the forty NBSAPs Parties developed since 2004, Germany is one of the three countries that included a system of measurable quantitative targets.

These facts give us an indication that there were developments and changes over the last two decades. By applying the Policy Arrangement Approach, I show a dynamic

---

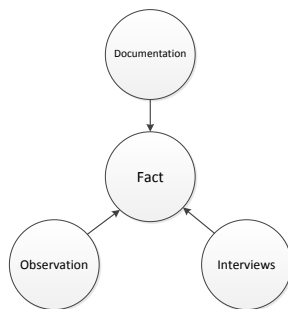
<sup>28</sup> According to the CBD national biodiversity strategy database, 29 countries that had revised strategies in mid-2010 were: Austria, Bhutan, Brazil, Botswana, China, Congo, Croatia, Cuba, Finland, Guyana, Hungary, India, Indonesia, Japan, Latvia, Netherlands, Niger, Norway, Mozambique, Morocco, the Philippines, Poland, Romania, Singapore, Sweden, Thailand, Turkey, UK, and Vietnam. Out of these countries, only six countries had revised the strategy more than twice. These countries were Bhutan, Japan, the Netherlands, Singapore, and Thailand. These data were from 2010 before the COP10. After the COP10 in 2010, more countries have revised their strategies. As of September 2013, the Secretariat received 20 strategies since COP10. These numbers also include revisions from abovementioned countries, such as Japan or the UK.

picture of the process of translating the CBD into actual practices in Germany and Japan.

Furthermore, comparing Germany and Japan has additional benefits. They are both industrial countries with similar size. Yet, they are also different in terms of social, economic, historical, and geographical contexts. In fact, the comparative analysis of the Germany and Japan is popular in the field of comparative politics and policy studies, including that of environment policy and politics (e.g. Foljanty-Jost 2004; Schreurs 2002; Tsubogou 2009). My research can also contribute to the field of comparative policy and politics of Germany and Japan.

## 4.2 DATA COLLECTION AND ANALYSIS

For the collection of data, I analyzed primary and secondary documentation, conducted interviews and observations. The multiple sources has several benefits since it can be also part of the triangulation process. In other words, I used multiple sources as the convergence of evidence and not for separate sub-studies<sup>29</sup>. In the following sections, I elaborate on each of the source types.



**Figure 4.1 Multiple sources and their contribution to the convergence of evidence**  
Source: Figure 4.2 of Yin (2003, 100)

### Documentation

Primary documents used in my research include minutes and transcripts of meetings, administrative documents and parliamentary discussions and policy documents (law

---

<sup>29</sup> For more details on the advantages of using multiple sources for triangulation, read Yin (2003, 99–100).

and regulation). My secondary sources include written report of events, scholarly (peer reviewed and non-peer reviewed) articles and newspaper articles. These secondary sources are published or printed materials but some of them are made available on the Internet as a pdf or html format<sup>30</sup>. For the case of sources with digital format, I downloaded or saved them so my analysis was based on the same source. The strength is this type of source is that it is stable, can be reviewed repeatedly<sup>31</sup> and is unobtrusive, unlike an interview or an observation of an event. Documents were useful in identifying the key actors in the policy arena, or served as supporting material on aspects mentioned in an interview. Some of the interview partners directly shared documents, both publically available and not available one they believed would be useful. Thus, being 100 percent neutral in the selection of sources was not possible. Bias in the selection of sources by interviewee or myself, and the reporting biases of the author of the secondary documentation are always present. Therefore I used multiple sources and not only documentation to support my arguments, but to have various perspectives on e.g. the same event. Table 4.1 (page 53) is an overview of the documents I analyzed for this research. I also specify the primarily use of each type of document.

---

<sup>30</sup> For example, Ministry of Environment of Japan uploads some of the minutes and transcripts of the working group meetings.

<sup>31</sup> When I used web sites and other sources available on the Internet, the pages were saved in pdf or html as a backup, in case the site is updated or becomes unavailable.



Table 4.1 Overview of the type of documents used

Document	Type of source	Origin	Use
Parliamentary minutes at the time of ratification	Primary	State	Provides factual information on parliamentary discussions at the time of ratification. Publicly available for Germany and Japan on the Internet as pdf or html. PAA use: primarily for the identification of actors and discourse.
National regulation (original text)	Primary	State	Provides factual information on national regulation. Only those relevant to NBSAPs. Publicly available for German and Japan on the Internet as pdf or html. PAA use: primarily for the identification of discourse and rules of the game.
NBSAPs (original text)	Primary	State	Provides factual information, as it is the original text of the policy document. For the German case, I also looked at the first National Report and the National Sustainable Development Report, as these served as NBSAPs before 2007. These are publicly available on the Internet as pdf or html. PAA use: primarily for the identification of actors, rules of the game and discourse.
NBSAPs and other related policies (factual documentation of the process)	Primary	State / private sector	For both Germany and Japan, meeting minutes and detail accounts of the process is available. These were considered to assist the original NBSAPs text. These are mostly publicly available on the Internet as pdf or html. PAA use: primarily for the identification of actors, rules of the game and discourse.
NBSAPs and other related policies (e.g. report and analysis of NBSAPs)	Secondary	State, NGO, academia, international organization, media	Following the publication of the NBSAPs, various actors have published reports related to and analysis on the NBSAPs. There are also press releases when the documents become available. These were mostly publicly available on the Internet as pdf or html. I considered them to be important documents, especially to analyze the discourse surrounding the strategy. PAA use: primarily for the identification of actors, rules of the game and discourse.
National report (original text)	Primary	State	National report is an official document submitted to the CBD Secretariat. It provides background information and overview on the status of implementation of each Party. These are publicly available on the Internet as pdf or html. PAA use: primarily for the identification of actors, rules of the game and discourse.

## Interviews

For the two case studies, interviews were the central and the most importance source. They contributed to improve analytical descriptions of social and political phenomena and fill in the blanks of investigation, in particular for the information provided in documents. Furthermore, I was able to capture ideas, values, opinions and impressions of the key actors of the policy arena during interviews, and these served as basis for the PAA analysis.<sup>32</sup> It allowed me to trace political processes that have not been documented elsewhere.

In my research, I conducted semi-structured interviews, in which I asked facts of the event or policy processes as well as their opinion and insights about the national biodiversity strategies and the CBD in their respective countries. My semi-structured interviews contained guiding questions asked, but the questions were not only limited to these. I adjusted them depending on the answer from the interviewee when I wanted clarification or more details on a specific part of their answer.

Interviews are *verbal reports* (Yin 2003, 92) and therefore the answers can be biased or inaccurate depending on the memory of the interviewee. This is why I did not only rely on one interview but conducted thirty-one interviews. Furthermore, when new information appeared during an interview, I crosschecked with documents or with other interviewees.

I carried out Interviews mainly between March and July 2011 for the German counterparts and between October and December 2011 for the Japanese counterparts (see Tables 4.3 and 4.4 on P.56 and 57). I always took notes during the interviews and digitally recorded whenever possible during the interviews.<sup>33</sup> I did

---

<sup>32</sup> The benefits of using interviews as main source for case studies have been identified in previous literature. Yin, who is known for case study methodology, states that interview is “one of the most important sources of case study information” (Yin 2003:89). Similarly, Barzelay et al. argue that interviews improve analytical description of social phenomena (Barzelay, Gaetani, Velarde, and Cejudo 2004, 364). Furthermore, other research that use PAA such as Veenman et al (2009) also use interviews as the main source.

<sup>33</sup> A total of twenty one interviews were digitally recorded.

not record the interviews digitally to transcribe the interviews but rather as a point of reference in case I could not capture everything in my notes during the interviews themselves. However, I selected a few quotations that support my argument and these were written out word-by-word, translated, and cited them in my case study. Notes of my interviews were also systematically coded according to their topic and later used for the description and analysis of the case study.

In addition to these formal interviews, during between October 2010 and December 2011, I engaged in a number of informal talks on the topic with practitioners such as policy makers or NGOs as well as experts such as scientists on national biodiversity strategies as well as the CBD. Just like interview sources, I did not use the information from informal talks as the main or the only source for my research. I used it as a complementary source of data to develop or modify the more formal interview questions. For example one of the interviewees in Japan stated that at the time of ratification of the CBD, the Environmental Agency was not the main government body that drove ratification but the Ministry of Foreign Affairs. I crosschecked this statement with parliamentary minutes and transcripts to confirm it was the case.

**Table 4.2 Overview of the interviews in Germany and Japan according to sector** <sup>34</sup>

Quantity	Sector	Location
10	Academia	Japan (7); Germany (3)
4	Business / Private Sector	Japan (3); Germany (1)
1	International organization	Japan (1)
8	NGO	Japan (3); Germany (4); Switzerland (1)
4	Parliamentary member	Japan (1)
4	Government	Japan (2); Germany (2)
<b>31</b>	<b>Total</b>	

Many of the interviewees, particularly actors in Japan, held multiple responsibilities. For example, they were cases whereby an individual was an employee of an international organization and at the same time university professor or an NGO representative and worked as a university professor. The table does not indicate these dual or triple roles of an individual to avoid double counting. I only listed them

<sup>34</sup> See Appendix for a detail list of the conducted interviews.

under their main occupation. In some instances, I interviewed the same interviewee twice for the purpose of triangulation. For more details such as the dual or triple roles of an individual, please see Table 4.3 and 4.4 (p.57).

**Table 4.3 List of interviews in Germany**

	Organization	Position/Department	Date and Place
D1	Institute for Organizational Communication (IFOK)	Senior consultant	05.04.2011 (Telephone)
D2	Helmholtz-Zentrum für Umweltforschung (UFZ) Network-Forum for Biodiversity Research Germany (NeFo) // Institute for Biodiversity –Network e.V. (IBN)	Researcher, Conservation Biology Department	03.05.2011 Regensburg, Germany
D3	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bundesumweltministerium, BMU)	Directorate NI1 “General and fundamental aspects of nature conservation, DG Coordination”	21.07.2011 (Telephone)
D4	German Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN)	Competence center for the implementation of the national biodiversity strategy (KoNaBS)	19.07.2011 (Telephone)
D5	Nature and biodiversity Conservation Union (Naturschutzbund Deutschland, NABU)	Director of European Affairs, Brussels	15.06.2011 (Telephone)
D6	World Wildlife Fund Germany (WWF Germany)	Director Biological Diversity, International Biodiversity Policy	29.03.2011 (Telephone) 02.02.2012 (Telephone)
D7	Helmholtz-Zentrum für Umweltforschung (UFZ) Network-Forum for Biodiversity Research Germany (NeFo)	Researcher, Department of Conservation Biology	04.04 and 04.06.2011 (Telephone)
D8	Nature and biodiversity Conservation Union (Naturschutzbund Deutschland, NABU)	Policy Officer for Nature Conservation and Species Protection	30.05 2011 (Telephone)
D9	Forum Umwelt & Entwicklung (FUE) // ProNatura	Coordinator for WG Biodiversity for the FUE	30.06.2011 (Telephone)

Table 4.4 List of interviews in Japan

	Organization	Position	Date and Place
J1	A SEED JAPAN	Trustee member	04/12/2011 Tokyo, Japan (Skype conference)
J2	Atomi University	Professor	17/10/2011 Tokyo, Japan
J3	Democratic Party of Japan	Upper House Politician	27/10/2011 Tokyo, Japan
J4	Ecological Society of Japan	President (from 2012)	26/10/2011 Yokohama, Japan
J5	International Union for Conservation of Nature – Japan unit (IUCN-J)	Chair Person	20/10/2011 Tokyo, Japan
J6	Japan Civil Network for Convention on Biological Diversity	Coordinator	11/11/2011 Mie, Japan; 27/12/2011 Mie, Japan
J7	Kashima Corporation	Deputy General Manager of Office of Global Environment	24/10/2011 Tokyo, Japan
J8	Ministry of Environment - Japan	Nature Conservation Bureau Subsection Chief	25/10/2011 Tokyo, Japan
J9	Ministry of Environment - Japan	Nature Conservation Bureau Assistant to the Head of the Office	25/10/2011 Tokyo, Japan
J10	The Nature Conservation Society of Japan (NACS-J)	Secretary of IUCN-Japan	19/10/2011 Tokyo, Japan
J11	Japan Business Initiative for Biodiversity	Secretariat	14/10/2011 Tokyo, Japan
J12	Sekisui Chemical Corporation	CSR division	31/10/2011 Tokyo, Japan
J13	Sophia University	Professor	10/2011, Tokyo, Japan; 23/12/2011, Tokyo, Japan
J14	United Nations University-Kanazawa Unit	Director	24/10/2011 Tokyo, Japan
J15	World Wildlife Fund – Japan (WWF Japan)	Secretary to Chief Executive Officer	13/10/2011 Tokyo, Japan
J16	Yokohama National University	Professor	04/11/2011 Tokyo, Japan

### Observation of events

Another source of inspiration of my research was direct observation. I observed several events related to the implementation process between October 2010 and November 2011<sup>35</sup>. I was mainly a silent listener to the event and took notes. It was useful to collect information about the CBD and national biodiversity strategies, but I did not use them as a main source, but a complimentary one. I was only able to take part in the events when financial means were available and the event took place within a reasonable distance.

The advantages of observation as a data collection were that it enabled me to gather information that would not be captured in minutes or transcripts of the event. These include informal interaction between the different stakeholder groups (e.g. relationship between the government and NGO relations) or within the same group (e.g. relationship between the different NGO groups). I also used these events to be introduced to or directly meet potential interview partners. Furthermore, participating in the events helped to be up-to-date on the debates and discussions taking place at the national and international levels on the CBD and biodiversity as they consisted of experts in the field.

The full list of events I participated is listed in Table 4.5 (page 60). In addition to the information in the table, whenever I observed an event I noted down (1) who hosted the event, (2) who attended the event, (3) whether it was open or closed event and (4) content of the event. In addition, I focused on identifying informal and formal relationships between the different actors. For example, while participating in one of the IUCN meetings in Japan, I observed that a government representative thanked the NGOs for their position paper because it supported the MOE during the inter-ministerial bargaining for the Rio+20 draft). These informal exchanges can be captured by observing events.

---

<sup>35</sup> The Japanese government began the process to review the third NBSAPs in the fall of 2011 when I was carrying out my fieldwork. Direct observation in Germany on the other hand was limited due to the fact that the strategy was completed in 2007 before the commencement of my fieldwork. Thus, I relied more on documentation and interviews for the German case study.

Furthermore, by participating in these events, I was able to see that very often the events related to the CBD consisted of the same group of individuals, such as government officials, the NGOs and academics. There were often formal as well as informal relationships between them, and there was a actors' network at the national levels. As for the case of Japan, I quickly came to notice that most of the events at the national level took place in Tokyo. This is not surprising, since Tokyo is *the* political center of Japan, which is known for its strongly centralized government. Policymaking in general takes place in Tokyo. But through direct participation in these CBD related events I found out that although on paper the Japanese NGO network on biodiversity consisted of the NGOs around the country, the actors who were intensively involved in the national implementation were all primarily based in Tokyo area. The NGOs from elsewhere were often not part of the national processes. This observation was in particular important for my argument that the intermediaries of the global and national policies play a key role in the implementation of the international agreement. This point is further elaborated in the case studies and in the subsequent analyses.

**Table 4.5 List of participated events for the purpose of observation**

	Name of event	Short description of the event	Date &Place
1	10th Conference of Parties to the CBD (COP10);	International conference	October 18-29, 2010, Nagoya
2	Assessing implementation of CBD NBSAPs	Side-event at the COP10, hosted by the <i>UN University Institute of Advanced Studies</i>	October 18, 2010, Nagoya
3	Local communities within the context of the CBD	Side-event at the COP10, hosted by the <i>CBD Local Community Cacus and Secretariat of the CBD</i>	October 19, 2010, Nagoya
4	Science-policy interface – examples from Europe	Side-event at the COP10, hosted by the <i>Helmholtz Zentrum fuer Umweltforschung</i>	October 22, 2010, Nagoya
5	Presentation and interpretation of alien species in Japan	Side-event at the COP10, hosted by the National institute on environmental studies; Ministry of Environment, Japan	October 23, 2010, Nagoya
6	National Red Lists – challenges & opportunities	Side-event at the COP10, hosted by the <i>Zoological society of London</i>	October 25, 2010, Nagoya
7	Sustainable infrastructure development consistent with biodiversity conservation in Japan	Side-event at the COP10, hosted by the Ministry of Infrastructure, transport and tourism, Japan	October 26, 2010, Nagoya
8	Biodiversity in Japan and its conservation	Side-event at the COP10, hosted by the Museum of nature and science; Ministry of education, culture, sports, science and technology, Japan	October 26, 2010, Nagoya
9	Japan Business Initiative for Biodiversity (JBIB)	Part of the team of JBIB members at the Information booth at COP10	October 18-29, 2010, Nagoya
10	Heimat Vielfalt Leben - Gemeinsam schützen	NABU Conference	June 21, 2011, Berlin
11	Countries actions towards the implementation of the Nagoya Protocol of CBD	<i>A SEED Japan</i> (NGO) seminar on mainstreaming green economy	October 11, 2011, Tokyo
12	Living with species surrounding us, connecting biodiversity	NGO Event at the Nature environment information place	October 12, 2011 Tokyo
13	Implementation of Nagoya Protocol in Spain	Guest Lecturer Presentation at Sophia University by Dr. A.L. Candearasi	October 13, 2011, Tokyo
14	Status of other Asian countries, biodiversity policies after COP10	Open-seminar by the IUCN-Japan	October 20, 2011, Tokyo
15	NGO-Ministry of Environment Opinion Exchange on NBSAPs	Hosted by the IUCN-Japan in collaboration with NGOs and MOE	October 25, 2011, Tokyo
16	1st First meeting: Endangered species in Japan	Multi-stakeholder discussion hosted by the MOE, open to the public	October 31, 2011, Tokyo
17	1st working group meeting: Environmental law in other countries	Hosted by the Society of Environmental Law and Policy convened by the MOE	November 4, 2011, Tokyo
18	Satoumi and management of Ise national park	Excursion hosted by the NGO Group to think about the environment in Chubu	November 11-13, 2011, Mie, Japan



## 5. Case study 1 – Germany

In this chapter, I present my first case study. I first provide a general introduction on the CBD in Germany, followed by an overview on the status of biodiversity and a brief history of biodiversity policy prior to 1992 as background information. The first part shows there have been gradual and incremental changes in German environmental policy and policymaking. In the second part, I focus on the developments regarding the process of implementation of the CBD since 1992. I will then look at the developments of this period through the lens of policy arrangement approach (PAA) and describe the developments in terms of discourse, actors, power and rules of the game to deconstruct the policy area.

### 5.1 BACKGROUND TO THE CASE STUDY

#### Introduction

As a country that pushed demanding policies and targets during international environmental negotiations such as the climate negotiations in Kyoto, Germany in the 1990s has been a frontrunner in international environmental policy (Beuermann 2000, 104). It was also one of the first countries to sign the Convention on Biological Diversity (CBD) in June 1992. The German parliament passed the national law to implement the Convention in August 1993, and in December 1993, the German government delivered its instrument of ratification to the CBD Secretariat, making it a Party to the Convention.

Germany is a federal republic composed of sixteen federal states and the functions of the government are divided into three levels: federal government, federal states and local authorities. The federal law outlines provisions and these are further elaborated through the federal states' legislations (BMU 1998, 18). Under the German political system, the federal states are responsible for developing and enforcing the laws, unless the power is given to the federal government by the constitution. Due to this federal structure, the responsibilities for the implementation of the CBD are also divided between the federal government and the federal states. The Federal Ministry

for the Environment, Nature Conservation and Nuclear Safety (BMU) became responsible for the development of a national strategy to implement the CBD, and the federal states were put in charge for specific regulations on nature conservation (Beuermann 2000, 104). In the area of nature conservation and environmental policies, the cooperation between the federal government and the federal states is a key to their success, since the federal states take part in the federal legislative processes via the Bundesrat and the federal government consults the federal states from an early stage of the process (BMU 1998, 18).

Germany is a signatory to the CBD not only as a single state but also as a member of the European Community (EC). The EC signed the international agreement in 1992 and ratified the following year. This makes the EC an independent Party to the Convention. It has also developed its own biodiversity strategy to fulfill the goals of the CBD in 1998 and in 2011 as well as biodiversity action plans in 2001 and 2006 (EC 2011). Within the EC, the principle of subsidiarity is applied. This means the EC only takes action if and only when the Member States cannot adequately meet the goals of planned measures. Hence, the EC strategy on the implementation of the CBD is complementary to the reports, strategies and action programs of the individual Member States (BMU 1998, 18).

### **Status of Biodiversity in Germany**

With over 80 million inhabitants living on an area of approximately 357,000 km<sup>2</sup>, Germany is one of the most industrialized and densely populated countries in Europe. Furthermore, a large portion of Germany's industries is environmentally problematic (e.g. the automobile and chemical industries), agriculture is highly industrialized, and transportation traffic is one of the densest in Europe with increasing volume. Germany also shares borders with nine countries and most of its rivers have their sources in neighbor countries. All of these factors require greater efforts in environmental protection in Germany than in many other countries (Jänicke and Weidner 1997a, 33).

Today approximately 52 percent of the surface is for agricultural use, and forests and woodlands cover ca. 30 percent of the land. The forest coverage has been increasing

recently but remains significantly lower than the European average of ca. 45 percent. The share of settlements and traffic infrastructure is continuously growing and now accounts for approximately 13 percent of the total surface (European Environmental Agency 2010). This contributes to the loss and fragmentation of habitats.

The flora and fauna of Germany were primarily formed during the last Ice Age containing elements from various bio-geographical regions. There are about 750 different biotope types in Germany, but they occupy relatively small areas. These biotopes occur in certain water sources, cliffs, raised bogs, the Wadden Sea, forests and woods or high-alpine regions (BMU 1998, 15–18). However, a number of species and genera have gone extinct during the Ice Age and also more recently (BMU 1998, 15–18).

In comparison to tropical forests and temperate forests in other countries, Central Europe's woodlands do not have as high number of species. Nonetheless, in Germany there are approximately 9,500 species of plants, 14,400 species of fungi and 48,000 species of animals (CBD Secretariat 2011b). The German Red List contains animal and plant species, plant communities, habitats and habitat complexes that are either extinct, have disappeared or are endangered.<sup>36</sup> According to this document, 26.8 percent of the endemic ferns and flowering plants and 36 percent of the endemic animal species, 37 percent of breeding birds, over 70 percent of amphibians and reptiles, 68.6 percent of freshwater fish in Germany are considered endangered (BMU 2007, 17–18; CBD Secretariat 2011b). Furthermore, 72.5 percent of the habitats are also under threat (BMU 2007, 29). This makes Germany a country with one of the highest threat levels to biodiversity in Europe (BMU 2007, 29).

The threat to biodiversity in Germany are driven by human activities such as the destruction and dissection of habitats, intensive agriculture, hydraulic engineering, discharge of pollutants and nutrients, non-sustainable fisheries, leisure use (e.g. tourism), climate change, and invasive species (BMU 2007, 17–18). However, at the same time, the discontinuation of specific agricultural activities in ecologically

---

<sup>36</sup> For the consolidated Red List of 2009 see Riecken, Finck, Rath, Schröder et al. (2009).

valuable marginal land (e.g. oligotrophic grass land, mountain meadows, heathland and wetland meadows) or deficits in forest management are posing threat to biodiversity (BMU 2007, 17–18; Strijker 2005).

There is a system of protected areas in Germany: 13.5 percent of total land and 41 percent of marine areas are Natura 2000 sites. Natura 2000 is an EU-wide network of nature protection areas established under the 1992 Habitat's directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). In addition, there are 12 national parks, 57,800 nature conservation areas (3 percent of total land), 7,300 landscape reserves (30 percent of the total area, with some overlap with nature parks) as well as 92 nature parks, which covers approximately 24 percent of total land (CBD Secretariat 2011b).

### **Biodiversity policy (1945 – 1992)<sup>37</sup>**

The origins of nature conservation movement in Germany goes back to the turn of the twentieth century in the organized environmental movements and the objective of governmental regulation (Brand 1999, 37). Nonetheless, nature conservation has not always been on the top of the political agenda. With the emphasis on economic development after the Second World War, nature conservation became less of a political priority. In 1950 an umbrella organization of the German nature conservation groups, the Deutscher Naturschutzring (DNR), was founded; however, the DNR did not contribute significantly to bringing the environmental agenda forward in the 1950s and early 1960s (Brand 1999, 38).

This situation began to change in the late 1960s with the increasing sensibility to the environmental problems and the growing importance of planning processes at the municipal, regional and federal state levels (Brand 1999, 38). These changes called for a reorganization of the nature conservation framework and led to the establishment of the Federal Nature Conservation Act (Bundesnaturschutzgesetz, BNatSchG) in 1976. With BNatSchG, nature conservation became an integral part of

---

<sup>37</sup> Although Germany was divided into West and East between 1945 and 1990, Germany in this chapter only refers only to Western Germany.

an integrated, state-organized environmental management (Brand 1999, 38). The policy developments of the last 1960s set the norms of environmental policy to this day. These include the precaution (Vorsorgeprinzip) and cooperation (Koopeartion) principles as well as the Polluter Pays Principle (Verursacherprinzip) (Jänicke and Weidner 1997a, 137; Brand 1999, 38).

The jurisdiction surrounding the environmental issues also evolved in the early 1970s. The constitutional changes in 1972 changed the legal regulations in the areas of waste disposal, clean air and noise abatement. These policy areas became primarily regulated at the federal level, and the implementation and monitoring were put in hands of the federal states and municipalities (Brand 1999, 38). Moreover, two new bodies were founded to deal with Environmental issues. These were the Council of Experts on the Environment (Sachverständigenrat für Umweltfragen, SRU) established in 1971, and the Federal Environmental Office (Umweltbundesamt, UBA) founded in 1972 as advisory bodies to the federal administration (Jänicke and Weidner 1997a, 137). The Council of Experts on the Environment was set up as a body to provide advice on environmental matters. Independent social and natural scientists mainly university professors sat in this council. The UBA was established and modeled after the U.S. Environmental Protection Agency but the UBA had less autonomy and no regulatory function in comparison (Jänicke and Weidner 1997a, 137).

However, Germany soon entered a new period of political polarization: *ecology versus economy* between the mid-1970s and early 1980s (Brand 1999, 39). The oil crisis of 1973 and the global economic recession during the 1970s had an impact on the environmental reforms taking place in Germany. On one hand the German government formed closer alliance with industry and trade unions with the change in leadership to Helmut Schmidt. On the other, the environmental movement continued to exist particularly in issues related to atomic power plants and sites of radioactive waste. The new political party with a 'green' focus also entered the federal states parliament for the first time in the end 1970s (Brand 1999, 39). In terms of international environmental agreements, Germany signed a number of biodiversity-related agreements at the regional and international levels during this time, including the Convention on the Conservation of Migratory Species of Wild

Animals also known as the Bonn Convention of 1979 and the European Birds Directive (Council Directive 79/409/EEC) of 1979.

In comparison to the early 1970s, during which Germany was *not* a frontrunner in environmental policy, by 1980s Germany regained its position as an influential player in the international environmental politics (Jänicke and Weidner 1997a, 142). By the 1990s, the environmental movement in Germany was regarded as a model of a mature and successfully institutionalized one as well as an inspiration to others (Rootes 1999, 3). Furthermore, the federal German government was one of the first to acknowledge the responsibility of industrialized countries to reduce their resource consumption. The federal German government argued that globalization not only influenced the economic structure and practices worldwide, but also has an impact on the environment (Beuermann 2000, 97; BMU 1995, 11).

Governance related to environmental policymaking also evolved during the last four decades. The German environmental policy was first based on a top-down command and control approach. However, this type of policy started to face a number of problems to meet the environmental objectives due to its complexity. Gradually policymaking changed to a more consensus building one from a command and control, top down approach (Jänicke and Weidner 1997a, 140). The consensus building form of policy is based on cooperation of different stakeholders including scientists and members of the environmental organizations in the policymaking processes (Jänicke and Weidner 1997a, 140). There is more collaboration between the government and non-governmental actors such as environmental organizations as well as negotiations between the regulator and the regulated. Increasingly, environmental NGOs became involved in the consultation phase of environmental policymaking and decision-making processes at the macro- and meso-levels (Jänicke and Weidner 1997a, 140–141). The German environmental policy by the 1990s was a combination of hierarchical and cooperative aspects (Jänicke and Weidner 1997a, 141). While the state remained the regulator, it also started to cooperate with the regulated and other actors of society such as the non-governmental organizations. Not only were there bilateral cooperation between the environmental NGOs and the government or business, but also trilateral collaboration between all three (Jänicke and Weidner 1997b, 305).

The focus of the main environmental NGOs also changed in the early 1990s and they became more involved at the international level starting from the UN Conference on Environment and Development (UNCED). Most of the big environmental NGOs in Germany prior to the UNCED concentrated on the local environmental issues and were less involved at the international level (Beuermann and Burdick 1997, 89).

Furthermore, with the UNCED and under the keyword “sustainable development” collaboration between the environmental and development NGOs started to take place<sup>38</sup>. In 1991, more than 20 environmental and development NGOs<sup>39</sup> as well as other organizations such as church-related groups together founded the Clearinghouse 92. Clearinghouse 92 aimed to stimulate discussion on the issues surrounding environment and development between various social groups. Furthermore, in 1992 the BUND and DNR amongst other NGOs founded the UNCED 92 so that they could prepare the position of NGOs for the UNCED as a group. The BMU together with BUND and BNR jointly funded the NGO Secretariat of the UNCED 92 (Beuermann and Burdick 1997, 89).

Thus, Germany’s environmental policymaking has gone through a number of changes since the post-war period. It moved from a top-down, command and control approach to a consensus one, involving more stakeholders in the decision-making processes. It also shows that collaboration between the NGOs increased and became more institutionalized around the UNCED in 1992.

---

<sup>38</sup> At first only the development NGOs were active in *sustainable development* (Beuermann and Burdick 1997, 89). In 1989, approximately 30 development NGOs came together and launched the “One World for All” project to raise public awareness about sustainable development. In this project, the hardly any environmental NGOs were involved. On the environmental NGO side, even the larger NGOs (BUND, DNR and WWF) claimed to have worked on issues surrounding sustainable development from late 1980s but none of them launched any public campaign surrounding the topics of sustainable development until 1991 (Beuermann and Burdick 1997, 89).

<sup>39</sup> The group included DNR, BUND, German Trade Union Federation, Federal congress agricultural coordination, World Economy Ecology and Development amongst others (Beuermann and Burdick 1997, 105).

## 5.2 POLICYMAKING FOR THE IMPLEMENTATION OF THE CBD (1992 – 2011)

Germany signed the UNCED agreements including the CBD in June 1992. It ratified the CBD quickly, but developed its first NBSAP only in 2007. Nonetheless, over the course of twenty years, policy developments surrounding the implementation of the CBD in Germany have gone through changes despite the absence of a national strategy when we look at the discourse, power, actors and rules. I divided the last twenty years into two periods: (1) 1992 to 2003 and (2) 2003 to 2011. In the following sections, I describe the developments that occurred in the two periods separately, and then explicitly apply the Policy Arrangement Approach (PAA).

### **Period 1: 1992 – 2003**

#### *Ratification and 1995 BfN Report*

In June 1992, the German government signed the UNCED agreements, including the CBD. The CBD was the last of the international agreements following e.g. Ramsar and CITES and the German government placed relatively low priority on the negotiations in comparison to other environmental agreements (Beuermann 2000, 104). According to Beuermann, this was because the government was doubtful that the CBD would yield any significant outcomes for Germany, since the potential domestic benefits of an international convention like the CBD was unclear for Germany at that time (Beuermann 2000, 104). Gettkant, Simonis and Suplie (1997) argue that this lack of enthusiasm was also apparent in the German ratification document. It states that the CBD should not impose any additional costs to the federal government, federal states and municipalities because measures of the CBD are already implemented or are in the process of being implemented. Furthermore, it states that there should be no additional costs to the domestic economy resulting from the implementation of the CBD:



Im übrigen werden durch die Umsetzung der Maßnahmen des Übereinkommens in der Bundesrepublik Deutschland Bund, Länder und Gemeinden nicht mit weiteren Kosten belastet, weil diese Maßnahmen bereits umgesetzt sind oder im Rahmen der laufenden nationalen Naturschutzpolitik und der dortigen spezifischen Regelungen ohnehin umgesetzt werden. Auch für die inländische Wirtschaft ergeben sich aus der Umsetzung der Maßnahmen des Übereinkommens keine unmittelbaren zusätzlichen Belastungen, so dass auch keine unmittelbaren Auswirkungen auf Einzelpreise, das Preisniveau und insbesondere das Verbraucher- Preisniveau zu erwarten sind (Ratifizierungsgesetz cited in Gettkant, Simonis, and Suplie 1997, 7)<sup>40</sup>

This document makes it clear that economy was regarded more important than the implementation of the CBD, and that German government interpreted the CBD as an international agreement that a country could comply without implementation.

Despite the ratification document that did not call for any additional action, there were some initiatives taken to implement the CBD shortly after the UNCED. As the first step, the Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN) prepared a comprehensive review on the status of biodiversity in Germany, “Materialien zur Situation der biologischen Vielfalt in Deutschland” in August 1995. BfN is a subordinate body to the BMU and was founded to support the BMU in technical and scientific terms for the national and international nature conservation and landscape management (Bundesregierung 1993).<sup>41</sup> The BfN “developed the report with the purpose to outline the potential danger [of biodiversity in Germany] for the anticipated [national biodiversity] strategy.” Furthermore, it states in the report that the BfN “would develop the nature conservation criteria for the future

---

<sup>40</sup> English translation, “The implementation of the Convention shall not impose any additional costs to the German federal government, federal states and municipalities, given that such measures are already implemented or are in the process of implementation within the framework of national conservation policy and the specific regulations that are established. In addition, there shall be no additional costs beared to the domestic economy resulting from the implementation of the Convention so that there is no direct impact on retail prices and general price index, in particular the consumer prices” [own translation]

<sup>41</sup> The history of the BfN dates back to 1906; nonetheless, the current form of BfN came into existence following the UNCED in 1993 (BfN 2010)

oriented strategy for the conservation and sustainable use of biodiversity in Germany based on the status report” (Schaefer 1995, III). Thus, the report challenges the ratification document, which was satisfied with the existing policies for biodiversity. However, it was only a background report and not a policy.

#### *BMU 1995 Report*

The next document prepared by the German government was the BMU’s “Report on the Implementation of the Convention on Biological Diversity in the Federal Republic of Germany (*Bericht der Bundesregierung zur Umsetzung des Übereinkommens über die biologische Vielfalt in der Bundesrepublik*)” of October 1995.<sup>42</sup> In this document, the German government states that the existing legal framework namely the Federal Nature Conservation Act (BNatSchG) of 1976 was sufficient for implementing the CBD in Germany and that it provided almost necessary legal instrument:

Eine zentrale rechtliche Grundlage zur Erhaltung der biologischen Vielfalt stellt das Bundesnaturschutzgesetz (BNatSchG) dar. Es handelt sich um ein Rahmengesetz des Bundes, das durch Naturschutzgesetze der Länder ausgefüllt, konkretisiert und in wesentlichen Teilen für den Einzelnen verbindlich gemacht wird. Das Naturschutzrecht von Bund und Ländern dient auch zur Umsetzung internationaler Übereinkommen (wie des Übereinkommens über die biologische Vielfalt) und von Rechtsvorschriften der Europäischen Union<sup>43</sup> (BMU 1995, Section 3.1).

Although this document states that the BNatSchG was sufficient for implementing the CBD in Germany, the BNatSchG is primarily concerned with nature conservation and not necessary the sustainable use and access and benefit sharing of biological resources. The latter two are also goals of the CBD. In addition, in general BMU 1995

---

<sup>42</sup> From here onwards, I refer this report as the BMU 1995 Report.

<sup>43</sup> English translation: “A central legal basis for the conservation of biological diversity is the Federal Nature Conservation Act (BNatSchG). It serves as a basic law of the Federal government, which complied by nature protection laws of the federal states, concretized and the important individual parts are made binding. The nature conservation law of the federal government and federal states serves also as the implementation of the CBD and of the statutory provisions of the EU” [done by author].

Report highlights the positive aspects of the existing German framework. For example, it reaffirms,<sup>44</sup>

Der Umweltschutz in Deutschland hat ein im internationalen Vergleich *hohes Niveau* erreicht. Die Fortschritte im Umweltschutz werden getragen von einem *hohen* Umweltbewusstsein bei den Bürgern und innerhalb der gesellschaftlichen Gruppen, das sich in einem breiten Konsens hinsichtlich der Notwendigkeit umweltpolitischer Maßnahmen und *in zum Teil beachtlichen Leistungen und Initiativen niederschlägt* (BMU 1995, Zusammenfassung, Chapter 2, emphasis added by author).

Descriptions like these paragraphs support the interpretation of the German government that the existing German system was sufficient for the CBD.

Only a small fraction of the 1995 BfN report on the status of biodiversity is reflected in the BMU 1995 Report. In the BMU 1995 Report, the measures to implement the CBD are described in general terms (Beuermann 2000, 105). Thus, although the 1995 BfN report was prepared for the anticipated national strategy and outlined the potential danger of biodiversity, these were not reflected in the BMU Report of 1995.

#### *First National Report*

At the second Conference of Parties (COP2) in Jakarta in 1995, the Parties agreed that they must submit the first National Report by COP4 in 1998. Following the common structure for the National Report proposed by the CBD Secretariat, the German government developed a National Report in 1998. The BMU was responsible for producing the report for Germany.

In this report, the BMU employed a participatory approach to collect the data and information (BMU 1998, 10–11). The participants in this report not only included

---

<sup>44</sup> English translation: “Environmental conservation in Germany has achieved a high level in international comparison. The progress in environmental protection is supported by a high level of environmental awareness among citizens and in the social groups, which is reflected in a broad consensus on the need for environmental policies and in some notable achievements and initiatives” [done by author].

other governmental agencies and representatives from the federal states, but the BMU also consulted nature conservation and development NGOs as well as land management organizations. Furthermore, other participants such as those from the private sector, sport and tourism, and science and academia were part of the process (BMU 1998, 10). Thus, in contrast to the BMU 1995 Report, more actors were involved in the process of developing the report.

Similar to the BMU 1995 Report, the National Report also continued to highlight the positive aspects of the existing German environmental policy. For example, it included lines such as the “environmental protection in Germany has attained a high standard, especially with regard to policy on cutting pollutant emissions,” the sustainable use of forests in Germany that is “subject to statutory regulation for over 150 years” or the “varied and powerful set of legal, institutional and organizational instruments” in Germany (BMU 1998, 7).

This report was a more comprehensive report in comparison to the BMU 1995 Report, because it also highlights the importance of coordination and cooperation of the federal government and the federal states for the success of environment and nature conservation policies (see BMU 1998, 7, 18). The BMU acknowledges the key role of societal organizations such as the NGOs for the implementation (see BMU 1998, 28). At the end of the report, there is an Annex that lists example activities for the implementation of the CBD carried out by the NGOs (see BMU 1998, 121–135). According to Beuermann (2000, 106), the report was the first time NGOs’ activities on the implementation for the CBD were included in a government report.

In contrast to the previous BMU 1995 report, which was published in German, the national report was published in English. This means that the target audience of the report is non-German speaking readers. This is not surprising as national reports are requirement of the COP. Nonetheless, there was no NBSAPs developed during this period even though it was also a requirement of the COP.

However, this did not mean that there was no attempt made within Germany. In my interviews with governmental officials and NGO officials, it became clear that there were several attempts. For example, an NGO representative active during the 1990s

indicated that the BMU attempted to develop a national biodiversity strategy several times.<sup>45</sup> However, according to the interviews with both government and NGO officials,<sup>46</sup> none the initiatives in the 1990s resulted in an actual strategy and that this was primarily due to the lack of political will. Furthermore, according to a governmental official<sup>47</sup> the concept of developing a national strategy for implementing an international agreement was still a new idea during this time. According to another secondary source, the Environmental Minister stated that the attention to the issue of biodiversity and CBD had been insufficient and therefore the German public did not recognize [developing a NBSAPs] as an urgent issue (BMU 1996 cited in Beuermann 2000, 105)<sup>48</sup>.

Nonetheless, in parallel to these policy developments, the government also started to acknowledge the importance of biodiversity. For example, at an expert discussion on “The Goals of nature conservation and the use of nature (*Ziele des Naturschutzes und einer Naturnutzung*)”, Dr. Angela Merkel, the then Minister of Environment, argued, “Mankind cannot survive without nature in the long run, and on the contrary, nature could well manage without human kind. The most important goal of nature conservation is therefore the conservation of biological diversity.”<sup>49</sup> Alongside the emphasis on the intrinsic value of biodiversity, the economic value starts to appear in the narratives surrounding the CBD and biodiversity. A German politician Walter Hirsch said, “In Germany alone approximately 40,000 tons of plan-based materials are introduced with a total value of around 160 million DM. The world estimate is over 20 billion USD (...)” (see document BMU 1996).

At the actor level, there were developments within the NGOs following UNCED. The NGO initiative *UNCED 92* that was founded to prepare for the UNCED ended soon

---

<sup>45</sup> Interview partner D5 (see Table 4.3).

<sup>46</sup> Interview partners D5, D8 (see Table 4.3).

<sup>47</sup> Interview partner D3 (see Table 4.3).

<sup>48</sup> BMU (1996) cited in Beuermann (2000), Protokoll der Sitzung des nationalen Komitee für nachhaltige Entwicklung am 7. Februar 1996, unpublished document.

<sup>49</sup> Translation by author. original text: Der Mensch kann ohne die Natur auf Dauer nicht überleben, die Natur könnte umgekehrt sehr gut ohne den Menschen auskommen. Das wichtigste Ziel des Naturschutzes ist daher der Erhalt der biologischen Vielfalt.

after the conference. However, the collaboration between various NGOs did not end after the conference. They established another network in 1992. Thirty-five individual organizations came together and formed the German NGO Forum on Environment and Development (Forum Umwelt und Entwicklung, FUE).

The FUE was a network of NGOs active in environmental as well as development policy. It eventually brought together over sixty groups with more than 100 member associations, including women's and youth organizations (Beuermann and Burdick 1997, 92). According to the interview with both a governmental official<sup>50</sup> and an NGO official,<sup>51</sup> the FUE became the first *institutionalized* network that bridged the environmentally focused organizations and development policy focused organizations. It aims to be active at the national and international levels. The FUE works through the working groups (WG) and produces joint NGO position papers and strategies (see Forum Umwelt und Entwicklung 2012a). The "WG Biodiversity" focuses on the CBD and urges actions from governments and takes positions on the topic (Forum Umwelt und Entwicklung 2012b).

A steering committee exists within the FUE and it contains representatives from each of the NGO groups. The body defines the tasks of the FUE and also voices the positions and demands of the FUE to the government and the public (Beuermann and Burdick 1997, 92–93). Although it is a NGO network, the government is also involved. The BMU and the Federal Ministry for Economic Cooperation and Development's (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ) pressured the formation of the steering committee in the initial phase and they also provided the financial assistance to the establishment and running costs of the Secretariat (Beuermann and Burdick 1997, 97).

### *The German National Sustainable Development Strategy*

Alongside these developments related to the implementation of the CBD, the German government developed the German national sustainable development strategy,

---

<sup>50</sup> Interview partner D5 (see Table 4.3).

<sup>51</sup> Interview partner D9 (see Table 4.3).

“Perspectives for Germany” (Perspektiven für Deutschland), in 2002. This was the first national strategy on the issues surrounding the UNCED and the first one that included the concept of “biodiversity.” In this policy document, biodiversity is listed as an indicator for sustainable development.<sup>52</sup>

National sustainable development strategy was one of the policy instruments that was agreed at the UNCED (specifically in Agenda 21). It is about “integrating environment and development in decision-making” (UNCED 1992). It differentiates itself from traditional environmental plans since it should be “build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country” (UNCED 1992, Paragraph 8.7). However, there was no agreed submission due date for strategy within Agenda 21. Only a few countries developed such a strategy during the first years. The countries agreed a couple of years later at the Rio+5 Conference in 1997 that all countries should have their national sustainable development strategies completed by 2002 (Steurer and Martinuzzi 2005, 457).

Germany officially adopted its national sustainable development strategy in 2002, however, the process to formulate a strategy already started in 1996 with a formation of a small working group. Their work resulted in the publication of a policy document “Sustainable Germany” in 1997. Subsequently, the BMU published a strategy proposal “Sustainable Development in Germany” in 1998 shortly before the elections. However, according to a previous research by Jänicke et al. (2001, 8) the cabinet did not formally endorse the strategy.

After the Federal elections and the victory of the coalition between the Social Democratic Party and the Green Party also known as the “red-green” coalition, the process to build a national strategy started again but at a slower pace. In January 2000, the Bundestag asked the government to formulate a German national sustainable development strategy and form a Council for Sustainable Development. With this, the process of developing a national sustainable development strategy

---

<sup>52</sup> Listed under Section D “Indicators and goals”, I.5 (Bundesregierung 2002a, 101–102, 2002b, 101–102).

became official. However, the Conference of Environmental Ministries of the federal states also supported the appeal in April 2000 but stressed the need to be included in the process, which meant that the approval of the federal states became necessary. In July 2000, the Cabinet decided to work on the national sustainable development strategy and develop an institution for the process: a Committee of State Secretaries for Sustainable Development (Green Cabinet) (Jänicke et al. 2001, 8). The committee brought high-level politicians from ten ministries together and it was chaired by the Ministry of the State (Steurer and Martinuzzi 2005, 460–461). The final strategy contained the results of the consultation with various other organizations as well as the recommendations of the Commission. This means if we include the unofficial processes in the late 1990s, the process of developing a German national sustainable development strategy was a long and fragmented process.

The German national sustainable development strategy highlights the importance of biodiversity, but the definition of biodiversity is limited to the species diversity level (Doyle, von Haaren, Ott, Leinweber, et al. 2005). The original strategy employs the terms “Artenvielfalt” (species diversity) interchangeably with “biologische Vielfalt” (biological diversity). The formal definition focuses only on the species level of biodiversity while the latter could extend to include genetic or ecosystem diversities (for details on the various definitions of biodiversity, see Chapter 2). The topic of biodiversity is covered in the chapter “Biodiversity, conserving species –protecting habitats;” thus, it concerns the protection of habitats and is concentrated on the ecological aspects of biodiversity.

## **Period 2: 2003 – 2010**

### *National Biodiversity Strategy and Action Plans*

Around the turn of the twenty first century, there were developments surrounding the CBD and biodiversity at the national and international levels. At the international level, more and more Parties to the Convention started to submit a NBSAP.<sup>53</sup>

---

<sup>53</sup> For the overview of the number of Parties and their National Biodiversity Strategy and Action Plans, see Figure 3.1.



According to a government official who has been involved in the biodiversity policies since the 1990s,<sup>54</sup> the pressure on the German government to have a national biodiversity strategy started to increase. A number of different entities criticized the lack of a national biodiversity strategy. For example, the German Advisory Council on Global Change (WBGU) in 1996 and 2000, the OECD in 2001 and the Enquete-Commission in 2002 (Doyle, von Haaren, Ott, Leinweber, and Bartolomäus 2005, 349).

Furthermore, according to an NGO official,<sup>55</sup> biodiversity started to receive more attention at the international level, for example due to the 2010 Biodiversity Target. The 2010 Biodiversity Target was first initiated by the EU, and it was adopted as part of Strategic Plan for the CBD at the sixth Conference of Parties to the CBD (COP6) in the Hague in 2002. Parties committed themselves to “to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth” (CBD Secretariat 2011a). The 2010 Biodiversity Target became not only a target related to the CBD, but the heads of the states also endorsed this target at the World Summit for Sustainable Development in Johannesburg in 2002 and at the World Summit in New York in 2005. Furthermore, the 2010 Biodiversity Target became one of four new targets that were added to the Millennium Development Goals. With these developments, I observe that the attention to biodiversity started to grow in comparison to the 1990s.

Within Germany, the demand for an individual national biodiversity strategy saw a sharp increase with the decision to host the COP9 in Bonn in 2008. These were clearly stated in interviews of government officials.<sup>56</sup> Although the CBD Parties voted for Bonn in 2006, according to a government official,<sup>57</sup> almost all practitioners related to the CBD knew that Germany would host the COP9 by 2004. Knowing

---

<sup>54</sup> Interview partner D3 (see Table 4.3).

<sup>55</sup> Interview partner D5 (see Table 4.3).

<sup>56</sup> Interview partner D3, D4 (see Table 4.3).

<sup>57</sup> Interview partner D4 (see Table 4.3).

Germany would host the COP9 in 2008, there was a general political interest within Germany to develop the required NBSAP before the COP9 in 2008. According to interviews with a private sector consultant of the NBSAP process<sup>58</sup> and a NGO official,<sup>59</sup> this resulted in an increase in the political will. In fact, just on time, shortly before the COP9, Germany's first NBSAPs was adopted in 2007.

The preparation for the German NBSAPs took a total of four years, and similar to the national sustainable development strategy, the NBSAPs-process was long and fragmented. The unofficial process had already started by 2003 with an establishment of a small working group called "AG Vision." The group consisted of seven staff members of the BMU and BfN, and German Federal Environment Agency (UBA). They worked on developing concrete future visions for biodiversity and technically sound future oriented goals for all topics related to biodiversity. The German visions were aligned with international CBD criteria EU-strategy on biodiversity, and also used the COP decisions and the biodiversity related decisions at the World Summit on Sustainable Development (WSSD) in 2002 as reference materials. One of the participants of this process explained in an interview<sup>60</sup> that because this process was unofficial, the drawback was there was no legal-base to employ the results of the unofficial process for an official national biodiversity strategy.

However, a chance occurred in October 2004. The at-the-time Environmental Minister, Jürgen Trittin of the Green Party, ordered the development a comprehensive national biodiversity strategy in Germany. With this official order, it meant that the results of the AG Vision could be used for the national biodiversity strategy.<sup>61</sup>

In the next two years, the official process started and non-governmental actors such as the NGOs and researchers became more intensively involved in the process and

---

<sup>58</sup> Interview partner D1 (see Table 4.3).

<sup>59</sup> Interview partner D5 (see Table 4.3).

<sup>60</sup> Interview partner D3 (see Table 4.3).

<sup>61</sup> Interview partner D3 (see Table 4.3).

they were invited by the government to participate. In general, public participation in Germany has been increasing during the last decades; however they have been primarily focused on consultation on a finished document or strategy and disclosure of information (EIPP 2009, 16). The Federal Nature Conservation Act (BNatSchG) recognizes the direct and indirect participation of citizens through the nature protection advisory committees and legally registered nature protection associations. The government invites these associations to comment on the finished/final draft of a policy or law.<sup>62</sup>

Despite of these developments within Germany, the moderator of the process as well as a participant of the NBSAPs<sup>63</sup> described the process as a new and unique process in environmental policymaking at the national level. In contrast to these conventional ways of participating in the policymaking, the non-state actors were involved from an early stage of the process and contributed to the formation of the BMU draft as well as revision of the draft (Küchler-Krischun and Piechocki 2005). The NBSAPs process was not the first time the NGOs collaborated with BMU and BfN. They have been working together ad-hoc, as well as exchanging information. The participatory process known as the *Wilhelmshöher Gespräche* (the Wilhelmshöhe talks) consisted of seven meetings of an average of two days. A government official<sup>64</sup> described in an interview that working together through the Wilhelmshöhe talks “was not difficult” but involved a lot of time and money. According to an NGO representative,<sup>65</sup> the BMU and BfN created an “open atmosphere” for additional inputs from the non-governmental groups.

After the Wilhelmshöhe talks, the BMU published the draft strategy in July 2005 (BMU 2005). The BMU published the draft earlier than originally planned due to an

---

<sup>62</sup> This point was first mentioned in an interview with one of the experts in nature conservation policy, and it was later cross-checked with peer review work by Martens, Schlemminger and Wissel (2004, 143–145).

<sup>63</sup> Interview partners D1, D7 (see Table 4.3).

<sup>64</sup> Interview partner D4 (see Table 4.3).

<sup>65</sup> Interview partner D7 (see Table 4.3).

extraordinary German parliamentary election.<sup>66</sup> Chancellor Gerhard Schroeder of the Social Democratic Party lost a motion of confidence in July 2005, triggering an early federal election in fall. The results of the election could form a new federal government. This meant that there would be a possibility that the new government is not interested in a national biodiversity strategy and the government could dismiss the idea of a national biodiversity strategy even though it is almost completed. Thus, according to interviewees, the participants pushed to publish the draft to make it public and show the results of the Wilhelmshöhe talks.

The newly elected government of 2005, the CDU/CSU and SPD coalition, also continued to endorse the development of a national biodiversity strategy by officially stating it in the coalition contract (for the official coalition contract see Deutscher Bundestag 2006). With this affirmation from the government, the NBSAPs process resumed from November 2005.

The inter-ministerial consultation rounds (*Ressorts*) took place to discuss the draft. These consultation rounds are highly politicized and characterized by intense negotiations. According to an interview with a government official,<sup>67</sup> each line of the draft must reach a consensus amongst the Ministries.<sup>68</sup> During this negotiation process, some of the contents were watered down or dismissed due to conflicting interests. For example, concrete timeframes of the goals were taken out in the final strategy in areas such as B1.1.4<sup>69</sup> Genetic diversity of wild and domesticated species, B1.2.1 Forests, or B1.3.2 Cultural landscape. There were also contents that became more ambitious in areas such as B2.6 Mining of raw materials and energy extraction

---

<sup>66</sup> This point was mentioned by both a government official and the moderator of the process (interview partners D1, D3).

<sup>67</sup> Interview partner D4 (see Table 4.3).

<sup>68</sup> The process starts by involving the working level associates (*arbeitsebene*); however, when the group cannot reach a consensus especially for controversial topics, a higher level: *Fachabteilung* (Referat) negotiates. This goes up to *Abteilungsleiter* and eventually to the *Staatssekretär*. The highest level of negotiation is the *Bundesminister*, but it is rare that an issue is carried to this level and there were no issues within the NBSAPs, which required this level of attention.

<sup>69</sup> These numbers refers to the chapters in the national biodiversity strategy.

or B5 social awareness.<sup>70</sup> According to a government official,<sup>71</sup> overall the ministries agreed on most of the points in the BMU draft. Other stakeholders such as representatives from the federal states, NGOs and farmers associations commented on the final strategy text as part of the process. In November 2007, the Federal cabinet adopted the draft.

Both government officials as well as nature conservation representatives<sup>72</sup> stated in the interviews that the strength of the NBSAPs lies in the fact the Federal Cabinet adopted the strategy. Furthermore, a government official<sup>73</sup> explained in the interview that cabinet adoption means the NBSAPs is not only a strategy of the BMU, but all Ministries are bound to the goals in the strategy and thus must work towards them. Thus, these characteristics of the NSBAPs show the high political support from all relevant governmental actors.

The definition and understanding of biodiversity in the German NBSAPs extends from the BMU 1995 Report, National Report and the NSSD of 2002. In the NBSAPs, biodiversity has three levels: genetic, species, and ecosystem. The strategy also covers the socio-economic aspects of biodiversity as well as a focus on international aspects of biodiversity. Furthermore, the strategy emphasizes the responsibilities of the federal government, federal states, local governments and NGOs. In each of the issue areas, there is a list of expected actions by the “EU/federal government,” “federal states/local government” and “other players.” The federal government signed the CBD back in 1992, but here it stated that implementation is expected to be carried out by various actors and at varying levels.

The strategy also includes a detailed description of some of the projects that implements the CBD. These projects are different from the activities listed in the Annex of the first National Report. For one, the projects do not only concern the

---

<sup>70</sup> An overview of the differences between the 2005 draft, 2007 draft and the finally version is available through for example in the Master’s thesis by Lohse (2008), unpublished, pp. 84-93.

<sup>71</sup> Interview partner D4 (see Table 4.3).

<sup>72</sup> Interview partners D3, D4, D8 (see Table 4.3).

<sup>73</sup> Interview partner D4 (see Table 4.3).

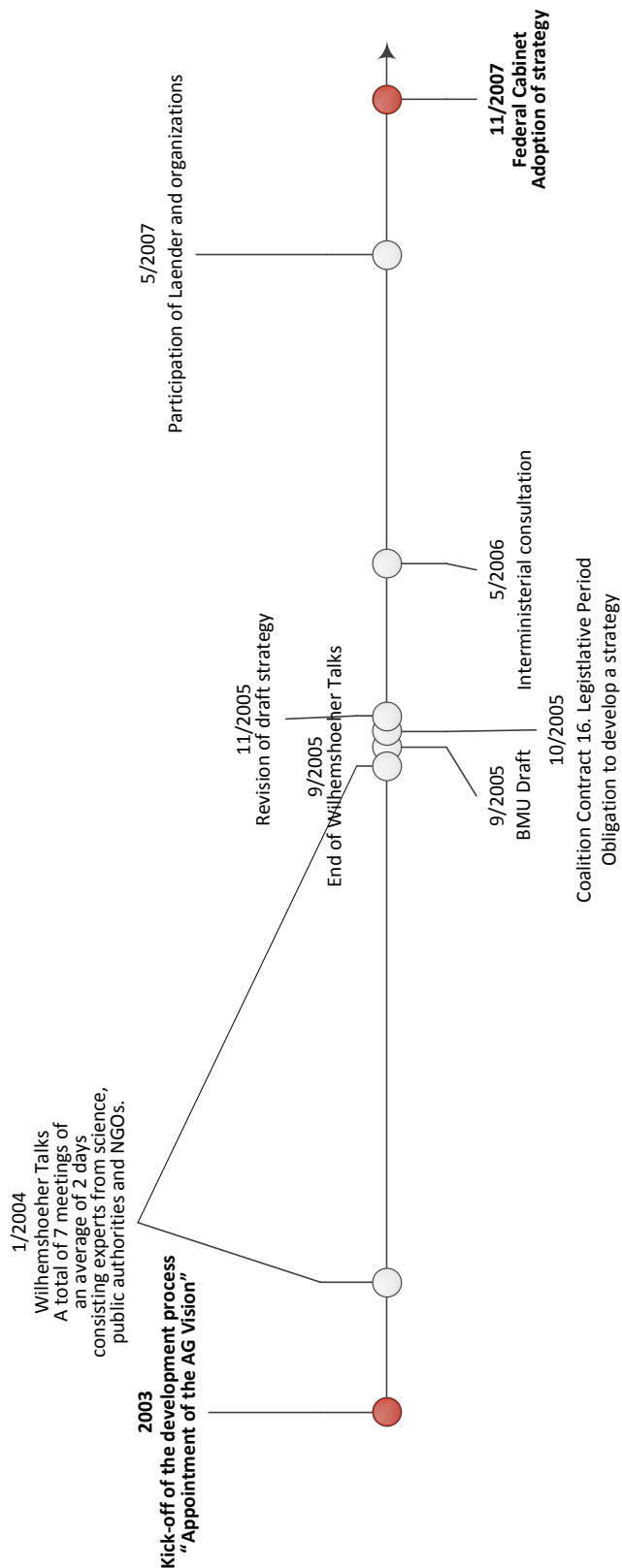
ecological aspect of biodiversity, but also the social as well as economic issues. Furthermore, many actors are involved in these project and they are often in forms of government and NGO partnerships.<sup>74</sup> On the other hand, I observed that none of the flagship projects featured in the NBSAPs involve the private sector.

Another characteristic of the NBSAPs is that it is not a standalone policy document, but the NBSAPs is embedded in the national sustainable development strategy and linked to a number of relevant sector strategies. It also makes reference to other international commitments such as Millennium Development Goals and responds to the Millennium Ecosystem Assessment.<sup>75</sup>

---

<sup>74</sup> For the exact projects, see BMU (2007, 111–120).

<sup>75</sup> For concrete examples within the strategy see BMU (2007, 93–94, 107–110).



**Figure 5.1** Timeline of the first NBSAPs  
Based on Kuechler-Krischun and Piechocki (2008).

### 5.3 APPLICATION OF THE POLICY ARRANGEMENT APPROACH

In this section, I analyze the policy developments in Germany through the lens of the Policy Arrangement Approach. In the order of discourse, actors, power and rules of the game, I deconstruct the policymaking for the implementation of the CBD in Germany.

#### Discourse

Discourse surrounding biodiversity has evolved during the last two decades. Firstly, today biodiversity is no longer only about nature conservation or an issue within national borders. The more recent understanding of biodiversity in the NBSAPs is that biodiversity has social as well as economic implications. There are concrete examples of monetization of ecosystem services, e.g. medicinal use of the resources.<sup>76</sup> The definition of biodiversity has also extended from focusing only on the species level to include genetic and ecosystem levels of diversities.

On the other hand, in the national sustainable development strategy of 2002, biodiversity is about species and habitat conservation and the term “Artenvielfalt” (species diversity) is used interchangeably with biodiversity. This reflects the fact that level of diversity covered under biodiversity primarily concerns the species level. In the 2007 NBSAPs, biodiversity is clearly defined as having three levels (genetic, species and ecosystems) (see BMU 2007, 9–10).

Other forms of diversities such as cultural diversity are featured in the 2007 NBSAPs. The “Internationalen Gärten e.V.” (English: international garden) is an example featured in the strategy where they pay attention to “biodiversity of the economic plants (German: Nutzpflanzen) as well as the cultural diversity.” The international garden initiative attempts to bring together families of various backgrounds (refugee, migrants, and German). Furthermore, the 2007 NBSAPs link the issue of biodiversity with development.<sup>77</sup> Although the 2007 NBSAP is a national strategy of Germany, it makes many references to international activities such as protected areas

---

<sup>76</sup> For concrete examples see BMU (2007, 12–13).

<sup>77</sup> See BMU (2007, 101–106) how NBSAPs link with development.



management in developing countries. These focus show that biodiversity became an issue not only for nature conservation but one that concerns culture or development. Moreover, the boundary of the strategy extended beyond national borders, which is a change from the first National Report that focused primarily on the actions at the national level.

In comparison to the first National Report, the text of the NBSAPs places more emphasis on the role of the NGOs in the implementation of the strategy. The actions of the NGOs are now in the main text.<sup>78</sup> This is in contrast to the text of the first National Report in which the activities of the NGOs were listed in the Annex. Furthermore, there is more emphasis on collaboration between the different sectors of society in the 2007 NBSAPs. In the National Report, there was a list of activities carried out by the NGOs; however in the NBSAPs the examples include joint projects by the government and NGO groups within and outside of Germany.<sup>79</sup> There is also an emphasis on collaboration. The examples in the NBSAPs are not only by the NGOs but are based on collaboration of organizations from different sectors of society.<sup>80</sup>

Thus, over the years, the understanding of the concept biodiversity in Germany evolved into a multi-dimensional concept that is not only about ecology and nature conservation but also about economic and social aspects. Furthermore, the narratives surrounding the implementation of the CBD extended from just compliance and have the necessary laws in place, but taking actions beyond the minimum requirement and involving non-governmental actors and encouraging collaboration.

### **Actors**

At the time of ratification, the two government bodies, BfN and BMU, were the main actors involved in developing the policy documents. From the first National Report, more non-governmental actors became involved in the process. The BMU used a

---

<sup>78</sup> See BMU (2007, 62–94).

<sup>79</sup> See BMU (2007, 111–120).

<sup>80</sup> See BMU (2007, 111–120).

participatory approach to collect the data for the first National Report. The participants involved in the creation of the Report not only included other governmental agencies and federal states, but the BMU also consulted nature conservation and development NGOs as well as land management groups. Other actors e.g. private sector, sport and tourism, and science and academia were also part of the process.<sup>81</sup> Non-governmental actors for biodiversity started to get involved in policymaking in the early 1990s.

Participatory approach continued to be in use in creating the National Sustainable Development Strategy. In this process, public participation of citizens took place and organized stakeholders were consulted. The involvement of these two groups took place primarily during the two dialogue phases of strategy formulation between 2001 and 2002. Furthermore, the German Council of Sustainable Development acted as a representative body of society's interest and was in charge of promoting the sustainable development projects to society. The suggestions from the German Council of Sustainable Development were actually used to rework the strategy. At the same time, there are also critical remarks on the level of involvement of non-governmental actors, and that the actual preparation of the strategy was carried out by a closed circle of federal executives (Tils 2007, 169).

Participatory approach continues to be used in the NBSAPs of 2007, and the non-governmental actors, especially the environmental NGOs, were actively involved from an early stage of policymaking. There were also scientists involved, but nature conservation organizations dominated the scene. However, according to one of the participants of the process,<sup>82</sup> representatives from industry, forestry and agricultural sectors were under-represented.

At the micro-level (personnel level), there were changes in the actors involved in the process. A trend I observed during my interviews was that there were movements of actors between the different sectors of society (i.e. NGO, government and politicians).

---

<sup>81</sup> For details see BMU (1998, 10).

<sup>82</sup> Interview partner D7 (see Table 4.3).

For example, there was an individual who used to be a government employee at the BMU but now work as an assistant to a politician of the Bundestag, or a former government employee at the BMU now works for an environmental NGO.<sup>83</sup> Through these exchanges, informal links and relationships have been building between the different sectors.

### **Power and Resources**

Based on the secondary sources and interviews, at the time of UNCED in 1992, the NGOs in Germany were not as unified as they are today. The NGOs today have developed a system in which they join their forces whenever necessary (Interview D9). This could be for a certain project or campaign, or for negotiation between different sectors of society. For example, through the establishment of the FUE, the NGOs align their position during negotiations at the international environmental conferences. A NGO official<sup>84</sup> also stated in an interview that by aligning and coordinating their voice, the NGOs have a stronger voice when negotiating positions. This was particularly important during the preparation and negotiations of the COP9 (NACS-J 2009). Jointingforces allow the individual NGO groups to gain more power than voicing their own individual points of view.

The political acceptance of the NGOs has also grown during the last twenty years. During the first decade, the government acknowledged the importance of the NGOs in the implementation, but in the second decade, the NGOs is also considered as a collaboration partner as reflected in the discourse. Furthermore, the NGOs also have played an important role for political processes at the national levels. The BMU and BfN are government bodies and its officials serve the government. Thus, they are not allowed to lobby to politicians. On the other hand, the NGOs could do so. According to the consultant of the NBSAPs process<sup>85</sup> the NGOs also lobbied politicians to make sure that the NBSAPs was on the Koalitionsvertrag. Moreover, the NGOs have also

---

<sup>83</sup> This was mentioned in an interview with a government official, interview partner D4, as well as in a report by a Japanese environmental NGO on German NGOs see NACS-J (2009, 8).

<sup>84</sup> Interview partner D9 (see Table 4.3).

<sup>85</sup> Interview partner D1 (see Table 4.3).

played an important role for the BMU during the inter-ministerial bargaining. Already by 1995, the BMU were interested in a qualified and coordinated input from the NGOs to back up their own position in inter-ministerial bargaining (Beuermann and Burdick 1997, 92–93).

In terms of financial resources and power, the BMU continues to provide financial assistance to the NGOs. For example, they provided funding for the coordination of the NGO network and more recently in 2011; a new funding scheme with an annual budget of 15 million Euros was adopted to support the implementation of the NBSAPs. The NGOs can apply for funding for their projects when they are aligned with the NBSAPs.<sup>86</sup>

Although scientists remained less dominant compared to the NGOs in the policy making for the implementation of the CBD, their power and resources have also gradually increased. In Germany, the researchers and scientists have taken upon a consultative role e.g. through the Council of Experts on the Environment and provided advice on environmental matters. During the NBSAPs, they were also invited to be part of the process of developing the draft of the NBSAPs. This made the scientists part of the process rather than an advisor. Thus, the NBSAPs was a new type of channel for them to take part in policymaking.

Furthermore, during the last years, researchers and scientists have increased their resources and political acceptance through e.g. the establishment of “the network forum for biodiversity research in Germany” (NeFo, Netzwerk-Forum zur Biodiversitätsforschung Deutschland). NeFo is an independent platform that exists as a project of Diversitas Germany, a network of scientists in the area of biodiversity launched in 2009. NeFo seeks to organize “communication and collaboration between different scientific disciplines for biodiversity research to foster interdisciplinary research” and “communication between science and potential science users (politicians, administrators, planners etc.),” making research results

---

<sup>86</sup> For details of the funding scheme see BfN (2011).

more visible, so decisions making based on sound scientific evidence takes place.<sup>87</sup> Through the NeFo website, scientists started to provide update and analysis on the COP10 in Japan. The mainstream media started to contact NeFo scientists who attended the COP for interviews and collecting information on the negotiations. According to one of the coordinators of the NeFo,<sup>88</sup> previously the NGOs were the main interview partners for the media regarding the CBD COPs. The list of media appearance (Medientipps) on the NeFo website also indicates that the incoming requests are constant,<sup>89</sup> and the COP10 was not a one-off interest coming from the media. It appears through NeFo scientists are also increasing their profile within the mass media.

### **Rules of the Game**

During the last two decades, there were no new formal rules concerning the policymaking of biodiversity. However, there were changes in the informal rules. As the formal rule, the Federal Nature Conservation Law (BNatSchG) recognizes the direct and indirect participation of citizens. Through nature protection advisory committees and legally recognized nature protection associations, citizens can indirectly participate to policymaking. The law grants nature protection associations the right to comment on the finished or final draft of an environmental policy or law. However, the case of NBSAPs goes beyond what it is required by this law. The non-state actors such as the NGOs and scientists were involved in the preparation of the BMU draft. This means the non-governmental actors were not only invited to comment on the finished national biodiversity strategy but they were part of the development process. This indicates a clear change in the rules of the game in policymaking.

---

<sup>87</sup> For more details see NeFo (2011).

<sup>88</sup> Interview partner D7 (see Table 4.3).

<sup>89</sup> See NeFo's website [www.biodiversity.de](http://www.biodiversity.de).

#### 5.4 ANALYSIS AND INTERIM CONCLUSIONS

The case of Germany shows that without a legal base or an official order from the German government, bottom-up attempts to develop a strategy does not always succeed. For the German case, the international requirement to develop a strategy did not act as a lever until mid-2000s. My observations show that one of the factors that finally pushed the German government to order the development of a NBSAPs was the COP9 held in Bonn. I argue that hosting an international conference play a role in increasing political will to meet international requirements and also raise societal attention on a given environmental issue.

A previous study on Germany's sustainable development strategy also observes that the presence of political will and commitment are *the* important factors for the development of the national sustainable development policy in Germany (Steurer and Martinuzzi 2005). This also supports my argument that in Germany international requirements are often not enough take more action at the national level. In other words, political will needs to be present, and international conferences at times have contributed in creating this.

Nonetheless, hosting international conferences is not the only factor of change. According to an interview with an NGO official,<sup>90</sup> the NGOs played an important role in bringing the NBSAPs topic on the political agenda by lobbying politicians in 2007. Based on the PAA analysis on actors and rules of the game, the NGOs' access to policymaking has evolved over the years and without these developments the NGOs would have not been likely to lobby as effectively in 2007. Moreover, an interview with a NGO official indicated that societal attention on biodiversity as an environmental topic started to increase in the 2000s with the international 2010 Biodiversity Target. Thus, even though the international conference was a key factor for change, I argue that the German NBSAPs was part of an incremental policy change taking place over the last two decades.

---

<sup>90</sup> Interview partner D5 (Table 4.3).

Furthermore, my research and analysis over the two decades show that the NBSAPs process did not start all of the sudden. For example, there were several attempts to develop a strategy in 1990s. Interviews with practitioners active already in the 1990s<sup>91</sup> revealed that they made several attempts to develop a NBSAPs since Germany signed the CBD in 1992. One of the interviewees indicated that even though attempts in the 1990s failed, the advocates were waiting for a chance to occur so they can push the biodiversity strategy agenda forward. Using the concept of policy window (Kingdon 1984), I argue that the COP9 created such a window of opportunity, allowing these actors to bring a certain agenda forward at the national level.

Moreover, discourse analysis shows that the understanding of the concept of biodiversity and values associated with it have become more aligned with the international discussions. Biodiversity is not only about nature conservation but socio-economic and cultural aspect of it must be considered today. I argue this convergence is due to the works of certain governmental actors, NGOs and scientists in Germany who have been acting as intermediaries of the international and national levels. The intermediaries follow the developments and requirements at the international level and translate them to the national context. I argue that this has been particularly important for the case of CBD because the international guidance from the CBD and policy documents from the COP are often vague and abstract, the international commitments cannot be applied to the national level easily. The BMU and BfN explicitly state that they considered the COP decisions, EU biodiversity strategy as well as the biodiversity related decisions of the World Summit on Sustainable Development when preparing for the draft document of the NBSAPs. Not only the governments, but also the NGOs and scientists closely follow the developments at the international level and disseminate information and interpret the relevance for Germany through initiatives like FUE and NeFo. They also participate in the national level policymaking. Through these activities, I argue that

---

<sup>91</sup> Two interviewees who were already active in the 1990s stated in an interview that the advocates of the NBSAPs were waiting for a chance to occur to develop a NBSAPs (Interview partners D3, D5).

the intermediaries play a role in translating how the international decisions can *fit* and have relevance to the local context.



## 6. Case study 2 – Japan

In this chapter, I present my second case study. I first provide a general introduction on the CBD in Japan, followed by an overview of the status of biodiversity and a brief history of environmental policy prior to 1992 as background information. The first part shows that over the years, there have been gradual and incremental changes in environmental policy and policymaking in Japan. In the second part, I focus on the implementation of the CBD in Japan since 1992 by focusing on the three NBSAPs Japan has developed during the last two decades. I will then analyze these developments through the lens of policy arrangement approach (PAA) to deconstruct the policy area.

### 6.1 BACKGROUND TO THE CASE STUDY

#### Introduction

Japan signed the CBD in 1992 and quickly ratified the convention the following year. The Japanese government promptly responded to Article 6 of the Convention and developed its first national biodiversity strategy in 1995, and subsequently revised the strategy document in 2002 and 2007. Some minor additions were made for the 2010 version and the government recently completed the fourth version in 2012. Furthermore, in 2008, the Basic Act on Biodiversity was enacted, which established the NBSAPs as a legally binding, statutory plan.

All of this makes Japan an exceptional country within the signatories of the Convention: Japan is one of the few countries that has made more than one version of the strategy and legally recognizes the NBSAP (Prip, Johnston, and Vierros 2010, 38–40). Nonetheless, this fact alone only reveals the surface of the story. During the last decades, policymaking related to the implementation of the CBD went through changes: biodiversity transformed from a government-led single issue to an issue transcending the sectors within the society and governmental bodies.

### **Status of Biodiversity in Japan**

Japan is one of the most industrialized countries and relatively small in size with 377,923.1 km<sup>2</sup>. Yet, it maintains rich biodiversity including a large percentage of endemic species due to its unique geography: Japan is composed of four main islands – Hokkaido, Honshu, Shikoku and Kyushu – and in addition, there are a number of small island groups such as Ogasawara-shoto, Daito-shoto, and Izu-shoto. The island group stretches over thousand kilometers from north to south and as a result there is a wide range of climate and ecological systems. Because Japan is located at the intersection of three tectonic plates, there are volcanoes, many hot springs and mountains ranges. Various natural disturbances such as eruption of volcanoes, earthquakes and floods occur relatively often. Floods are caused by monsoons and typhoons. In order to mitigate damages from these disturbances, riverbanks have been modified. Moreover, over time agricultural and forestry activities created new types of ecosystems. Some of these ecosystems that rely on human activities have become homes for unique species (Conservation International 2007b; Government of Japan 2009, 1-2).

Unique ecosystems are also formed in and around the sea. There are species-rich tidal flats, underwater forests and coral reefs. These ecosystems provide habitat for fifty of the world's one hundred twelve marine mammal species, approximately one-hundred of the world's three hundred sea bird species, and approximately 3,700 species of the world's roughly 15,000 sea fish species. Thirty-eight seabird species are also endemic to Japan (Government of Japan 2009, 1-2).

Forest coverage in Japan (including natural forests, secondary forests close to natural forests, secondary forests and plantations) is approximately 67 percent. This is among the highest coverage within the industrial countries. Natural forests and natural vegetation areas cover 17.9 percent and 19 percent of the Japan's total area and they are home to numerous species. These forests and vegetation areas are mostly located in the areas that are difficult for people to reach, such as steep mountains, peninsulas and islands (Government of Japan 2009, 2).

**Table 6.1 Species diversity in Japan**  
(Conservation International 2007c)

Taxonomic Group	Species	Endemic Species	Endemism ( percent)
Plants	5,600	1,950	34.8
Mammals	94	46	48.9
Birds	366	13	3.6
Reptiles	66	28	42.4
Amphibians	50	44	88.0
Freshwater Fishes	214	52	24.3

Table 6.1 shows the species diversity in Japan. The rate of endemism is high in Japan, especially for amphibians, and signifies the uniqueness of Japan's nature.

Nonetheless, biodiversity in Japan is under threat today. The Ministry of Environment's (MOE) Red List, a list of endangered wildlife species, includes 3,155 species, with 30 percent of the reptiles, amphibians and brackish/freshwater fish, more than 20 percent of mammals and vascular plants and more than 10 percent of birds (Government of Japan 2009, 2–5). The destruction and fragmentation of habitats, environmental changes brought about by overexploitation of the natural resources and alien invasive species are the main causes for the decline of biodiversity (Government of Japan 2009, 2–5). Furthermore, discontinuation of certain environmentally beneficial human activities such as traditional agriculture and forestry management have led to land-use changes and triggered rapid decrease in biodiversity of agricultural landscapes (Government of Japan 2009, 2–5; Uematsu, Koga, Mitsunashi, and Ushimaru 2010). These are caused by for example urbanization and demographic change. In 2005, Conservation International, an international environmental NGO, added Japan to the list of biological hotspots. Biological hotspots are characterized by the exceptional levels of species endemism and the serious levels of habitat loss (Conservation International 2007a).

### **Japanese biodiversity policy (1945 – 1992)**

Despite the biodiversity-rich environment of the Japanese islands, nature was not a main concern of the government or society after the end of the World War II. Thus, biodiversity, or let alone nature conservation, is a relatively new topic in the Japanese environmental policy. Similar to countries like Germany, the foremost priority of the postwar period was economic development. For example, the first national park was

already founded in 1934 but within the post-war development paradigm, even in these designated protected areas, industrial and agricultural development as well as clear-cut took place (Murakushi 2011). With an exception of the Oze-numa (Oze marsh) dam case in 1947-1950, there was no large-scale protest against development projects in the national parks. The Oze-numa dam case also resulted in a compromise between those who wanted to protect the marsh, the Alliance to Conserve Oze, and those who promoted development (Murakushi 2011). The Alliance to Conserve Oze later restructured itself into the Nature Conservation Society of Japan (NASC-J) in 1951 and became the main force against development in national parks during the post-war era (Murakushi 2011). To this day, the NASC-J remains as one of the largest and influential environmental NGOs in Japan. Nonetheless, their efforts and nature conservation in general did not develop into a large-scale societal movement. Nature conservation movements remained relatively weak in terms of its influence in the Japanese social and political landscape (Knight 2010b, 350).

Instead of nature conservation movements, the roots of Japanese modern environmental history are found in the citizen's anti-pollution movements from the 1950s to the 1970s (Imura 1997, 73). The Japanese economy continued to grow rapidly during the postwar period and, at the same time industrial activities put more and more pressure to the environment. Eventually the citizens themselves started to suffer from diseases such as organic mercury poisoning (Minamata disease) and asthma caused by air pollution. The inadequate handling of industrial waste by the Japanese corporations was one of the main drivers of these problems. The crisis reached its peak in the 1960s with the Four Big Pollution Diseases (四大公害病 - yondai kogai byo<sup>92</sup>). The citizens' protests, lawsuits and media campaigns urged the government to take action to regulate pollution. This resulted in a number of new environmental laws and the creation of the Environmental Agency in 1971 (Imura 1997, 73; Tsubogou 2009).

---

<sup>92</sup> The Four Big Pollution Diseases were, Minamata disease (organic mercury poisoning), second Minamata disease (organic mercury poisoning), Yokkaichi asthma (asthma caused by air pollution from SO<sub>x</sub>), Itai Itai disease (water pollution by cadmium).

Although many citizens continued to suffer from the effects of environmental pollution, new technologies such as flue-gas desulphurization and de-nitrification methods were invented to mitigate environmental pollution, and environmental conditions started to show improvement by 1970s (Imura 1997, 73). By then, Japan implemented one of the world's fastest and most successful air pollution control programs (Schreurs 2002, 71).

In the following two decades, the Japanese environmental policy and administration was governed by two laws: the Basic Law on Pollution Control (1967) and the Nature Conservation Law (1972) (Imura 1997, 74). The main focus of the national environmental policy as well as the task of the Environmental Agency was on environmental pollution control. As a result, there was little political attention given to environmental issues such as nature conservation until the 1990s (Interview J15; Knight 2010b). With the decrease in the level of pollution, the number of citizen activities also dropped, which left the Environmental Agency with little public support (Knight 2010b, 359–360).<sup>93</sup>

Moreover, the internal structure of the Environmental Agency contributed to its struggle to establish itself as an influential governmental body. When the Environmental Agency was founded in 1971, the staff was collected from the twelve existing Ministries, and the upper management positions were always held by officials from other Ministries in rotation. After one term, the officials would return to their “home” Ministries. This meant that there was a lack of support from upper management for any decisions or policies that would conflict with the interest of the other Ministries (J5 Interview; J10 Interview; Knight 2010b, 359–360). In addition, influential politicians rarely accepted the position to become the Director General<sup>94</sup> of the Environmental Agency (Knight 2010b, 359).

---

<sup>93</sup> This is not to say that environmental movements were completely absent in Japan but they remained mostly a not-in-my-backyard (NIMBY) phenomenon (Schreurs 2002, 71).

<sup>94</sup> The Director General is the head of the Environmental Agency. This position is appointed by the government like any other heads of governmental bodies. In most cases, these heads are politicians.

During the 1980s and early 1990s, different environmental problems started to emerge in Japan. Japan during this period is often described as a “Doken Kokka” or in English the construction state. This was because the Japanese government started to actively invest in large-scale infrastructure projects as part of public works. This included building roads, new towns, railways, harbors, filling tidal flats, dams and airports. The ministries officially promoted the large infrastructure projects as a means to increase domestic demand and stimulate economic growth (Imura 1997, 73; Kingston 2004, Chapter 5). Between 1992 and 1999 a total of 120 trillion Yen (ca. 1.2 trillion Euro) was spent on economic recovery packages (Kingston 2004, 124). In 1993 alone 31.8 trillion Yen of public funds, which equaled 43 percent of the year’s national budget, were paid to the construction industry for public works (Knight 2010b, 357). The ministries for construction and transportation were the responsible authorities with strong relationship to the construction industry (Imura 1997, 73; Kingston 2004, Chapter 5).

Following the collapse of the economic bubble around 1990, the development paradigms started to be questioned (Imura 1997, 74). The growing government debt and the impact of these projects on economic recovery became a topic of debate and the large-scale public projects such as dams started to be seen as the symbol for “environmental destruction.” Around the same time, environmental issues were starting to gain prominence at the international level such as the UNCED in 1992. 172 countries, including Japan, were represented at the UNCED. Following these international developments, the scope of environmental issues in Japan also started to expand from dealing solely with local matters to integrating global concerns such as climate change and global biodiversity (Imura 1997, 74).

## **6.2 POLICYMAKING FOR THE IMPLEMENTATION OF THE CBD (1992 - 2011)**

In June 1992, the Japanese government signed the UNCED agreements including the CBD. Over the course of twenty years, policy developments surrounding the implementation of the CBD in Japan have gone through changes in the discourse, power, actors and rules. I divided the last twenty years into three periods based on when the three NBSAPs were developed: (1) 1992 to 2000, (2) 2001 to 2005 and (3)

2005 to 2011. In the following sections, I describe the developments that occurred in the three periods separately, and subsequently explicitly apply the Policy Arrangement Approach (PAA).

### **Period 1: 1992 – 2000**

#### *Ratification*

Prior to the Convention on Biological Diversity (CBD), there was no widely used word for the concept “biological diversity” in Japanese. Thus, there was a discussion amongst scholars how to translate the name of the Convention without losing its original meaning.<sup>95</sup> The official translation of the CBD was agreed as Convention regarding Diversity of Living Matters (or 生物の多様性に関する条約 in Japanese). Following the UNCED, discussions took place at the National Diet<sup>96</sup> whether or not to ratify the newly signed international agreements (the UNFCCC and the CBD).

In the discussions at the National Diet, the focus of the CBD was not about ecology or environment, but it was about the foreign policy implication. The government argued that, “[The two conventions of the UNCED] are beneficial [to Japan] from the perspective of promoting international cooperation regarding global environmental issues” (Japanese Diet 1993a, 1993b, 1993c). The government emphasized it was important to quickly ratify the UNCED agreements to show that Japan was taking an initiative in global environmental issues (Japanese Diet 1993a, 1993b, 1993c). Furthermore, they repeatedly assured that the CBD contained limited obligatory clauses. By combining existing national laws such as the Wildlife Protection and Hunting Management Law, Natural Parks Act, Nature Conservation Law, the Law for the Conservation of Endangered Species of Wild Fauna and Flora, Japan met the requirements of the Convention and no legal adjustments were necessary (J13 interview; Japanese Diet 1993c; WWF-Japan 2008).

---

<sup>95</sup> Interview partner J13 (see Table 4.4).

<sup>96</sup> The National Diet (Kokkai in Japanese) is the bicameral legislature in Japan. It is composed of a lower house (House of Representatives) and an upper house (House of Councilors). In addition to passing laws, the Diet is responsible for selecting the Prime Minister.

Nonetheless, there were voices within the National Diet members as well as the NGOs that questioned this interpretation. The critics argued that the existing legal framework in Japan was not sufficient to implement the CBD, especially because the CBD brought in new concepts to environmental policy that were not reflected in the Japanese legal system, for example, sustainable use of biological resources, protecting areas for biodiversity conservation, or equity of genetic resources. Nonetheless, they were the minority. Thus, without major political objections, both the House of Representatives and House of Councilors quickly voted to ratify the CBD in May 1993. With this decision, Japan became the eighteenth signatory to the CBD (Japanese Diet 1993a, 1993b, 1993c).

The main actors during this period were the Ministry of Foreign Affairs (MOFA) and the Ministry of International Trade and Industry (MITI). Before a country ratifies an international agreement, the government checks the legal compatibility of the new agreement against the existing domestic legal framework. In case of the CBD (and UNFCCC), the MOFA was the responsible body to conduct this review. Although the CBD was an environmental agreement that called for national implementation, there was no consultation with other government bodies that were directly responsible for the topics related to biodiversity such as the Environmental Agency or Ministry of Agriculture and Fisheries (Japanese Diet 1993c). Furthermore, the industry associations were an important actor behind the scene, as they put pressure on the government by arguing that they would impede the ratification of the UNCED agreements if it meant more regulation for their economic activities.<sup>97</sup>

### *The Basic Environmental Law*

Despite the initial arguments put forth by the government that legal adjustments were not necessary in Japan or that the IEAs only had foreign policy implications, several legal reforms took place in the following years. One of the first reforms was the enactment of the Basic Environmental Law in 1993. The scope of the existing two environmental laws, Basic Law on Pollution Control (1967) and the Nature

---

<sup>97</sup> Interview partner J13 (see Table 4.4).



Conservation Law (1972), could not address the global environmental issues introduced at the UNCED (Imura 1997, 74). The Basic Environmental Law established a new basis and framework for Japanese environmental policy, embracing all environmental regulatory administration. It also incorporated concepts introduced at the UNCED. The Basic Environmental Law is founded upon the idea of an integrated environmental policy with all relevant policy areas and the concept of sustainability, which underlines the importance of economic development but with limited environmental burdens. Sustainability discourse entered into Japanese environmental policy.

For the development of this Basic Law, the Environmental Agency had put together a team to work on the fundamentals of a new basic environmental law by mid-May of 1992 (Schreurs 2002, 171–172). After negotiations and discussions, the Basic Environmental Law was enacted in November 1993 as a replacement for the Basic Law on Pollution Control and the Nature Conservation Law. The final version was watered down than the original proposal of the Environmental Agency by the MITI in areas such as Environmental Impact Assessment (EIA) and carbon taxation (Schreurs 2002, 170–172).

#### *The First NBSAP*

Following the ratification of the CBD, the Environmental Agency quickly reacted to develop a NBSAPs to meet Article 6 of the Convention. The government decided on a goal to have its first NBSAP ready before the COP2 in November 1995. The Environmental Agency formed an inter-ministerial conference to draft the strategy, and this document was adopted by the Council of Ministers for Global Environment Conservation in October 1995. With this, Japan became one of the first countries to have a NBSAPs. During this period, “global” was one of the key ideas surrounding the CBD in Japan.

Another idea surrounding biodiversity and the CBD was “co-existence with nature.” Discussions on how to achieve economic development with limited environmental burdens started to take place. The idea of co-existence, economic development and environment are not depicted as completely opposing forces and achieving both as

possible. For the policymaking for the implementation of the CBD, “co-existence with nature” appears in the NBSAPs as well as related documents such as the booklet of the first NBSAPs: “Towards the Global Environment where All Living Organisms coexist.” In the Basic Environmental Plan of 1994, one of the long-term goals is “the co-existence of nature and human.”

Despite the quick development of the first NBSAPs, the policy document, itself, soon became a target for criticism. The Japanese environmental and conservation NGOs argued that the quality of the strategy was not sufficient and lacked coherency because it was merely a collection of what Ministries and Agencies submitted to the Environmental Agency.<sup>98</sup> Eventually, the NGOs gave the nickname “*staple strategy*” to the first NBSAPs for its incoherent characteristics.<sup>99</sup>

Although an “inter-ministerial conference” took place, there was very limited collaboration between the governmental agencies. The lack of inter-ministerial coordination is considered typical in the Japanese administration system whereby strong vertical divisions persist between the agencies.<sup>100</sup> The first NBSAPs was also a closed process, led by the government. In the first NBSAPs, the NGOs were not invited to participate nor did not they have an official or unofficial route to influence the outcome of the NBSAPs. The power of NGOs in Japan was weak due to their limited ability to influence policymaking and so was the collaboration between the different NGOs.

---

<sup>98</sup> Interview partners J5, J8, J9, J10, J15 (see Table 4.4).

<sup>99</sup> Interview partners J5, J10, J15 (see Table 4.4).

<sup>100</sup> This characteristic of the Japanese administrative system is referred to as “Tatewarigyosei” in Japanese. In the environmental policy area previous literature have identified a number of examples in such lack of communication and coordination have caused redundancy and hinder comprehensive management (Hiwasaki 2005, 756). For example, the lack of coordination in the management of forest ecosystem reserves by the Forestry Agency in majority of the national forest in national parks and the national park management (Kato 2001) or the overlap of Forestry Agency’s forest ecosystem reserves and national nature conservation areas designated by the MOE (Hiwasaki 2005, 755).

*Legal reforms following the first NBSAP*

The government stated they would reexamine the first NBSAP after five years. The next strategy became available in 2002, and until then, several changes in the biodiversity policy took place. Most of these changes were amendments to the laws on the topics of agriculture, fisheries and forestry, adding the line “for the conservation of environment” in Article 1 (the purpose of the law). For example, the River Law (1964) amended in 1997 states:

The purpose of this Law is to contribute to land conservation and the development of the country, and thereby maintain public security and promote public welfare, by administering rivers comprehensively to prevent occurrence of damage due to floods, high tides, etc., utilize rivers properly, maintain the normal functions of the river water by *maintaining and conserving the fluvial environment* (Article 1, emphasis added by the author);<sup>101</sup>

Similarly, the Coastal Law (1956) in 1999:

The purpose of this Law is to help conserve the land of Japan by protecting the country's seacoast from damage due to sea or ground movement including, but not limited to, tsunami, storm surges and high waves, *improving and conserving the coastal environment and promoting proper use of the coast by the public* (Article 1, emphasis added by the author);<sup>102</sup>

---

<sup>101</sup> Official translation of the law is available from Infrastructure Development Institute - Japan (see Infrastructure Development Institute - Japan 1999).

<sup>102</sup> Official translation of the law is available on <http://www.japaneselawtranslation.go.jp> (Ministry of Justice).

And the Port and Harbor Act (1950) in 2000:

With the aim of contributing to the development of transportation and suitable utilization and balanced growth of the national land, the purpose of this Act is to provide for orderly development and appropriate management of ports and harbors, together with the development and maintenance of waterways, while considering environmental conservation (Article 1, emphasis added by the author).<sup>103</sup>

Before these laws were amended, they facilitated development than protecting the nature (J16 Interview; Oikawa 2010). Hence, these amendments in Article 1 are significant. Furthermore, the government enacted the Food, Agriculture and Rural Areas Basic Act in 1999, which explicitly acknowledged the “maintaining and improving natural cyclical function of agriculture.” The Basic Law for Establishing the Recycling-based Society was adopted in 2000, which aimed to promote a recycling-based society with low consumption of natural resources and environmental burdens.

## **Period 2: 2001 – 2005**

### *The Second NBSAP*

The Central Government Reform took place in 2001 and with this reform, one new ministry was founded and several Ministries and agencies were merged and abolished. Environmental Agency was only body that was “upgraded” to a Ministry. From 2001 onwards, its head, the Minister of Environment (MOE) became a Cabinet member. The newly established MOE commenced the process to completely revise the first NBSAPs in January 2001. In March 2002, the Cabinet Council for Global Environmental Conservation adopted the second NBSAPs.

The process of developing a NBSAPs became more extensive, open and multi-stakeholder oriented compared to the previous version that was only based on

---

<sup>103</sup> Official translation of the law is available on <http://www.japaneselawtranslation.go.jp> (Ministry of Justice).

an inter-Ministerial meeting. The second NBSAPs process started with a series of inter-ministerial study group meetings on biodiversity before the official process. The MOE was the convener of this process. The study group met six times between March and August 2001. Officials from various Ministries discussed and learned about the issues surrounding biodiversity by inviting experts from the scientific community as well as NGOs.<sup>104</sup>

The Central Environmental Council and its NBSAPs subcommittee started the official revision process in October 2001 based on the results of the study group. The Central Environmental Council is an advisory body for environmental issues, which was founded in January 2001 based on the Article 4 of the Basic Environmental Law. Under the Central Environmental Council, subcommittees are often formed to deal with specific topic in depth, in this case the NBSAPs. During the official process led by the Central Environmental Council and the NBSAPs subcommittee, various stakeholders such as Ministry representatives and non-state actors (the NGOs and scientists) were invited to further share their expertise. Unlike the first NBSAPs that happened behind closed doors, the second NBSAPs was more transparent. The minutes of the subcommittee meetings as well as all distributed materials were available to the public via a website. Furthermore, the completed draft was open for the public for three weeks to provide comments. This meant that the public had more access to policy making in comparison to the first NBSAPs. After a year and three months, the second NBSAPs was adopted by the Cabinet Council for Global Environmental Conservation (Figure 6.1 is a graphic representation of the process).

---

<sup>104</sup> Interview partners J5 (see Table 4.4).

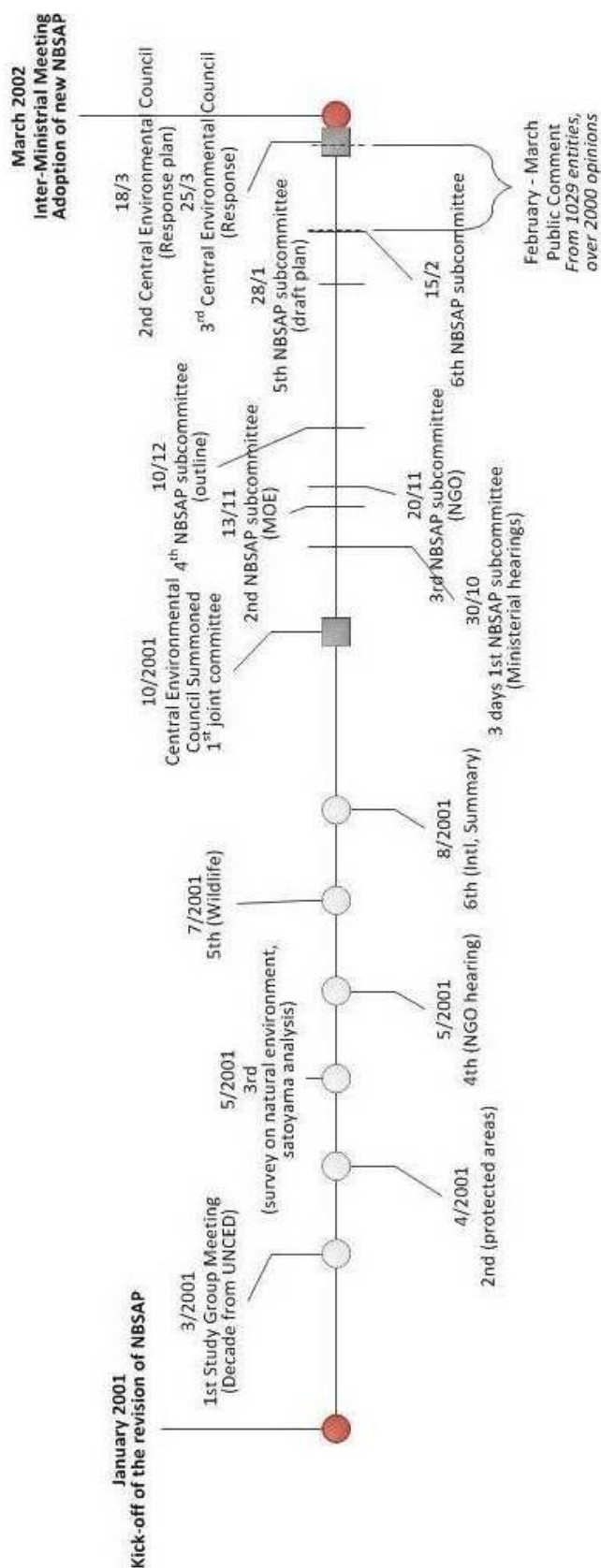


Figure 6.1 Timeline of the second National Biodiversity Strategy and Action Plans  
 Source: MOE (n.d.) [http://www.biodic.go.jp/cbd/nbsap\\_2002outline.html](http://www.biodic.go.jp/cbd/nbsap_2002outline.html)

The new NBSAPs was more extensive, and analyze ecological aspects of biodiversity and the status of biodiversity in Japan in-depth in comparison to the first strategy (J10 Interview; Ministry of Environment 2007, 3–7). Furthermore, the new strategy identified three main threats to biodiversity in Japan: (1) increasing human activity, (2) decreasing human activity in *Satoyama* and *Satochi* areas and (3) foreign invasive species. In addition, “nature restoration” [自然再生 - shizensaisei] was listed as one of the three main policies for biodiversity alongside conservation and sustainable use (see *Part 3, Chapter 1, Section 1-2* and *Chapter 2, Section 4*). In addition, the strategy included more analysis on socio-economic aspects of biodiversity, indicating that strategy takes a holistic view to biodiversity and do not only consider nature conservation.

Nonetheless, most of the practitioners of biodiversity saw that the second NBSAPs did not incorporate the developments at the international level,<sup>105</sup> and domestically focused. It was a “unique Japanese NBSAPs.”<sup>106</sup>

While the previous NBSAPs lost its momentum quickly and was never a widely known policy document, the second strategy was different. For instance, major newspapers featured the new strategy. This resulted in over a thousand phone calls to the MOE within two working-days (“Key Person interview - Director-General of Nature Conservation Bureau, Ministry of Environment, Hiroshi Onodera (in Japanese)” 2003). In addition, the NGOs such as the NASC-J hosted events to support the implementation of the new strategy biodiversity.<sup>107</sup> They informed the public about *Satoyama* and its importance to biodiversity.<sup>108</sup> The NGOs did not support the first NBSAPs through such initiatives. Furthermore, a reviewing mechanism for the implementation of the NBSAPs was introduced by the Central Environmental Council (Government of Japan 2009, 28–29).

---

<sup>105</sup> Interview partners J8 and J10 (see Table 4.4).

<sup>106</sup> Interview partners J8 (see Table 4.4).

<sup>107</sup> Interview partners J10 (see Table 4.4).

<sup>108</sup> Interview partners J10 (see Table 4.4).

Behind the scenes, there were also structural changes taking place within the MOE, which had an impact on the NBSAPs. A new Director-General for the Nature Conservation Bureau of the MOE, Hiroshi Onodera, entered into office in January 2001 and he initiated the revision process. Having worked as park ranger in his early years at the MOE, Hiroshi Onodera was already used to the idea of multi-stakeholder and participatory approaches to policymaking.<sup>109</sup> He was convinced of the idea to think together for a solution (for environmental issues) than the top-down government-led policymaking. He incorporated these ideas into the second NBSAPs process.<sup>110</sup>

The term “Sankaku” (参画, active participation of stakeholders) or participation started to appear more frequently together with policymaking in general in the 2000s. For example, Prime Minister Jyunichiro Koizumi stated:

To aim for a society where we co-exist with nature, based on the National [biodiversity] strategy we have just adopted, I would like to call upon action, in which the government acts in unity as well as the local government, citizens, NPO and corporations amongst many others are *taking part in the planning* (Government of Japan 2002, emphasis added by author).

In terms of ideas, the “co-existence of nature and human” continued to exist in this period. It became an umbrella concept for other related projects and initiatives such as the Satoyama conservation.

The literal meaning of Satoyama in Japanese is mountains, woodlands and grasslands (Yama) surrounding villages (Sato), and Satoyama together denotes the semi-managed and semi-cultivated lands mostly consisting secondary forests (Knight 2010a, 422–425). The origins of the term can be traced back to the 18<sup>th</sup> century, but Satoyama was discussed together with nature conservation only since the 1990s. This was when biologists reported on the important ecological functions of the

---

<sup>109</sup> Interview partners J5 (see Table 4.4).

<sup>110</sup> Interview partners J5 (see Table 4.4).



Satoyama areas as a source of habitat for unique species. The biologists warned that the discontinued traditional agricultural activities and forest management has caused land-use change, putting the ecosystem in danger (Setoguchi 2009, 164–165).

Focusing on Satoyama for nature conservation purposes differs from typical nature conservation activities that focus on the protection of prime-nature. Satoyama conservation is about human-influenced natural environments; thus, the conservation of Satoyama supports the “co-existence of nature and human” discourse. Satoyama is an example where humans are an essential actor that creates and sustains a given ecosystem.

Another idea that appeared under the idea of “co-existence with nature” was “nature restoration.” Nature restoration is a new policy instrument introduced in the early 2000s, which also appears in the second NBSAPs. The aim of nature restoration is not about mitigating biodiversity loss or sustainably using the resources, but about actively bringing back “nature” that had been once lost due to human activities in order for ecosystems to regenerate (*Second NBSAPs Chapter 2, Section 4, A*).

Nature restoration projects are presented as one of the means to achieve “a society in which [humans] could co-exist with nature by conserving biodiversity and by doing so to contribute to the conservation of the global environment” (Article 1, Nature Restoration Promotion Law). Nonetheless, humans are not regarded as a creator of life –as reflected in the title of summary booklet of the second NBSAPs “Life cannot be (artificially) made,” the nature restoration is based on the premise that man-made environment are not the same as natural environment.

Furthermore, the idea that “biodiversity is a universal topic” started to be emphasized during this period. For example, Director-General for the Nature Conservation Bureau of the MOE (Hiroshi Onodera) is quoted in an interview saying:

“Why do we have to conserve the diversity of species?” We thought this [question] would be the central topic at the inter-ministerial meeting and were preparing how we should response to such a fundamental question. However, no one raised that question [at the meeting]. Conservation of biodiversity has become self-evident today” (“Key Person interview - Director-General of Nature Conservation Bureau, Ministry of Environment, Hiroshi Onodera (in Japanese)” 2003)

After a decade since the introduction of the term biodiversity, it became a topic that speaks to everyone, and regarded as an overarching concept and less controversial in comparison to e.g. climate change.

#### *Legal reforms following the NBSAPs*

Aside from these new developments surrounding the NBSAPs, several laws were also enacted and amended in the 2000s “with the angle of biodiversity.”<sup>111</sup> Most visibly, the Natural Parks Law was amended in 2003. The new law explicitly states that it is the responsibility of the state and local governing bodies to “Conserve the ecosystem diversity and the diversity of species” (Article 3). Prior to this amendment, scenic beauty was the central concern of the Natural Parks Law for recreation and tourism purposes. Natural parks were defined by Nature Conservation Bureau as “natural areas of outstanding scenic beauty in Japan” (Ministry of Environment - Nature Conservation Bureau 2001, 16). This means the parks were not chosen not due their ecological functions or significance. Thus, this amendment signified a potential shift in the focus of the National Parks Law to conserve biodiversity and promote greater community involvement (Hiwasaki 2005).

The nature restoration projects also became legally endorsed with the enactment of the “Nature Restoration Promotion Law” in December 2002. The Nature Restoration Promotion Law (2002) aims to:

---

<sup>111</sup> Interview partners J5 (see Table 4.4).

[P]romote the policies for nature restoration and for a society in which we could co-exist with nature by conserving biodiversity, and by doing so to contribute to the conservation of the global environment (Article 1).

In line with what had been reaffirmed in the second NBSAPs, the new law also states that the publically funded nature restoration projects are to be carried out taking the participatory approach. Furthermore, the Nature Restoration Law was placed under the jurisdiction of three Ministries: the MOE, Ministry of Agriculture, Forestry and Fisheries (MAFF) and Ministry of Land, Infrastructure, Transport and Tourism (MLITT). This joint responsibility was remarkable in the Japanese law at that time because usually there was one Ministry responsible.<sup>112</sup> The Nature Restoration Law was a result of compromising varying interests of the three Ministries; e.g. the MOE could protect and conserve biodiversity by restoring natural habitats, the MAFF could ensure fishery activities, and the MLITT could keep their budget through the new type of public projects.<sup>113</sup>

In addition to these two laws, in 2002 the Cartagena Act was enacted, which regulates the use of Living Modified Organism resulting from biotechnology (LMOs). It provides rules to assess the effect of LMOs on biodiversity in advance as well as to appropriately use the LMOs. The enactment of this law was not due to the second NBSAPs, but following the result of the adoption of the Cartagena Protocol on the Biosafety, a supplement to the CBD, in January 2000. Following the developments at the COP6 in 2002, the Invasive Alien Species Act (2004) was also adopted. It aims to prevent the adverse effects of invasive alien species on the ecosystems, human safety, agriculture, forestry or fisheries. Japan became one of the only Parties to the Cartagena Protocol to have a stand-alone law on invasive alien species at the national level.<sup>114</sup>

---

<sup>112</sup> Interview partners J5 (see Table 4.4).

<sup>113</sup> Interview partners J5 (see Table 4.4).

<sup>114</sup> Interview partners J13 (see Table 4.4).

### Period 3: 2006 – 2011

#### *The third NBSAPs*

In 2006, the Japanese government decided to stand as a candidate to host the COP10 in 2010. The discussion to host the COP10 started when the Executive Secretary of the CBD, Ahmed Djoghlaif, asked Director of the Global Environmental Bureau of MOE of Japan, Hideki Minamikawa, if Japan would like to host the COP10 at the COP6 in March 2006. By August 2006, it was communicated to the public that Nagoya would officially stand as a candidate city and that it was likely to be accepted since no other Parties was indicating interest (e.g. Asahi Shinbun 2006; Nikkei shinbun 2006). Several of my interviewees including a government official<sup>115</sup> explained that the year 2006 was a turning point for biodiversity in Japan, since a number of policy developments started to take place.

Following the decision to host the COP10, the MOE initiated the process to revise the second NBSAPs in August 2006. The draft was completed and adopted by the Cabinet in November 2007.

In terms of actors, the members of the MOE team responsible for the second NBSAPs was replaced by a new team by 2006. Such frequent change in personnel is typical in the Japanese administrative system because it is based on two to three years rotation system for all positions.<sup>116</sup> According to the nature conservation organization official,<sup>117</sup> the new MOE team was first reluctant to revise the national biodiversity strategy and the team only agreed to revise as a result of the pressure from the NGOs.

In terms of the process, despite the initial reluctance, it did not largely change from the previous revision. Seven round-table conferences took place before the official process started in April 2007 at the Central Environmental Council. In addition, eight

---

<sup>115</sup> Interview partner J8 (see Table 4.4).

<sup>116</sup> I found out about the frequent change in personnel during interviews with a senior member of the IUCN Japan (Interview partner J5) and an official of the Nature Conservation Society of Japan (Interview partner J10). I cross-checked this statement in a peer-reviewed article on Japanese environmental policy by Knight (2010a, 359).

<sup>117</sup> Interview partner J10 (see Table 4.4).

regional meetings took place to collect voices from all over Japan. The subcommittee for NBSAPs was formed under the Central Environmental Council. The NGOs and scientists were invited to share their views and expertise. The minutes as well as all distributed documents were made available to the public (Figure 6.2).

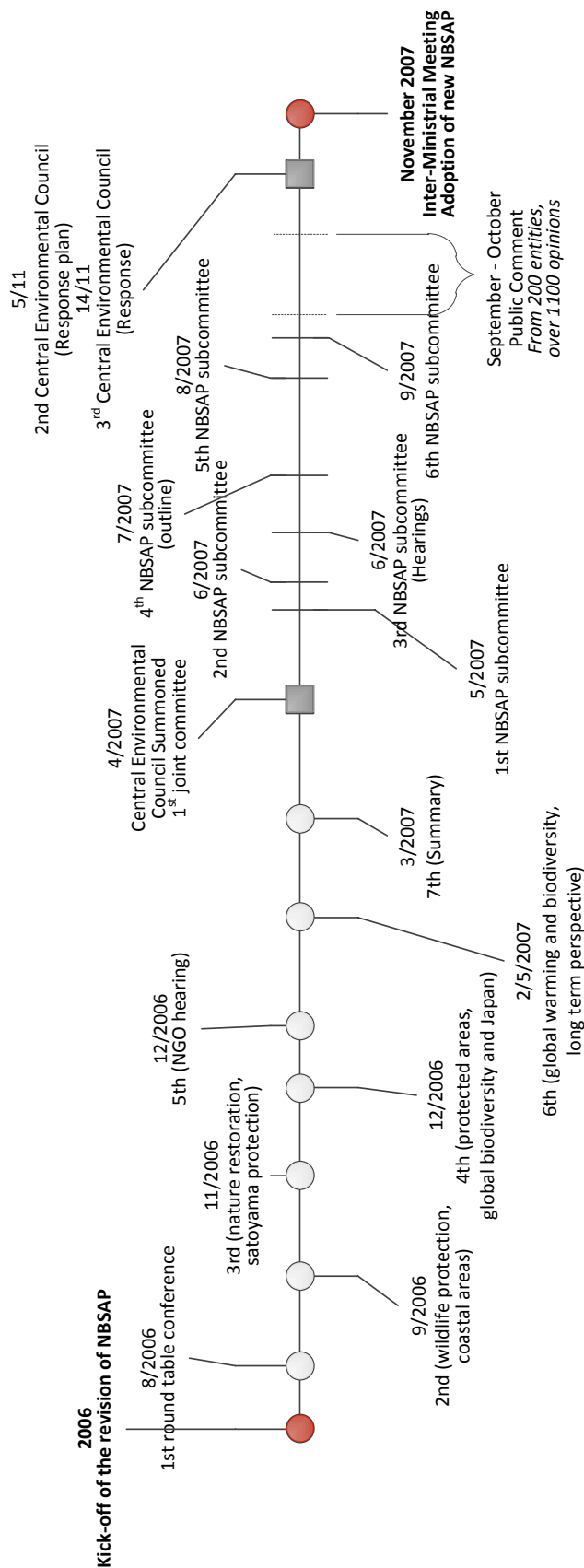


Figure 6.2 Timeline of the third NBSAP  
Source MOE (2007)

In terms of the content, the third NBSAPs was a built on the previous NBSAPs. The same three threats to biodiversity was listed. However, “climate change” was added as a new threat to biodiversity in Japan. In comparison to the previous strategies, the action plans became more concrete and quantified: 660 measures and 34 quantitative goals.

International-national linkage became stronger during this period. According to a Nature Conservation Society of Japan official,<sup>118</sup> the discussions on ‘how to take action based on the CBD and its decisions’ started during this period.’ I argue that this point is also supported in the third NBSAPs policy document itself as “Taking action with a global perspective” is identified as one of the four pillars of policy. Furthermore, foreign policy implications of the CBD and biodiversity started to become more prominent during this time. For example, I found the following paragraph in the NBSAPs:

Our country has an impact on the world’s biodiversity. Acknowledging this, we will take action with a global perspective. We would take a leadership role especially the conservation of biodiversity in the Asia-Pacific region and endorse international cooperation (Third NBSAP “Action Plan” Chapter 2 “Cross-sectoral, fundamental policies”, Section 4 “International programs”).

The emphasis on the international-national linkage of biodiversity was not only on paper. According to a Nature Conservation Society of Japan official<sup>119</sup> the Japan committee for IUCN (IUCN-J) played particularly active role in bringing this agenda forward outside of the official NBSAPs process. The IUCN-J is not a single organization but a network of organizations, which comprises twenty-three organizations including major NGOs in Japan such as NACS-J and WWF-Japan as well as two ministries, the MOFA and the MOE, and an industry association, Keidanren (the Japan Business Federation). In 2006, the IUCN-J hosted series of events in terms of study seminars on the CBD and COP as well as an international symposium on the

---

<sup>118</sup> Interview partner J10 (see Table 4.4).

<sup>119</sup> Interview partner J10 (see Table 4.4).

topic (See Table 6.2). According to a Nature Conservation Society of Japan official who actively took part in these events, through these unofficial events, discussions on how to integrate and align international agreement at the national-level took place (see IUCN-J 2011 for an overview of the activities). I argue these are signs of transnational learning, which was not as apparent during the last period. Furthermore, in an interview with an university professor specialized in biodiversity policy,<sup>120</sup> I found out that the MOE had commissioned experts on the CBD such as university professors to carry out an analysis on other countries' NBSAPs (e.g. Korea, Australia) to learn how others are implementing the CBD.

**Table 6.2 List of events on the CBD hosted by IUCN-J between 2006 and 2007**

	Seminar theme and main speaker, Date
1st study seminar (09/2006)	"The CBD today and the future and Japan's NBSAPs" Lecturer: Professor H. Isozaki
2nd study seminar (10/2006)	"The NBSAPs and local action: case of England and Japan" Lecturer: Professor K. Hara
3rd study seminar (12/2006)	"Integrated coastal zone management" Lecturer: Professor S. Kiyono
International symposium (01/2007)	"The Convention on Biological Diversity –towards a NBSAP that links Japan and the World" The CBD Secretariat: A. Djoghlaif IUCN Chief Scientist: J. McNeely MOE, Deputy Director-General Nature Conservation Bureau: Kuroda Keidanren Committee on Nature Conservation: N. Okubo

Although the IUCN-J became suddenly an active organization in the area of CBD and biodiversity, the IUCN-J was not newly founded. In fact the IUCN-J was founded in 1980 together with the launch of the World Conservation Strategy (WCS). Originally it was founded with the purpose to exchange information with the IUCN headquarters and facilitate cooperation between member organizations within Japan. Nonetheless, the network remained relatively politically inactive during the first fifteen years. Their involvement in the implementation and development of the NBSAPs in 2006 was a drastic change for IUCN-J. According to the IUCN-J official,<sup>121</sup>

<sup>120</sup> Interview partner J15 (see Table 4.4).

<sup>121</sup> Interview partner J10 (see Table 4.4).



the reason behind the shift in their strategy was because the IUCN-J “started to collect donations from 2005 and felt the responsibility to give back to our donors by taking actions.” The same official also explained that the IUCN-J collectively chose the CBD and biodiversity as the focus of their activity, because it was considered as a topic that all network members could have a stake in unlike the conventional nature conservation programs that may cause division within the network members. The concept of biodiversity was considered to be an umbrella that could cover a variety of topics and interests. The IUCN-J official also stated this characteristic of biodiversity made it “easier to take a joint action” as a network.

The discourse surrounding the concept of Satoyama saw some changes in this period. Previously, Satoyama was about endangered man-made nature as opposed to nature untouched by humans and the importance of conserving it. Satoyama during this period began to be portrayed as a symbol for traditional Japanese values and the location in which ideal sustainable management is taking and/or have taken place. Satoyama became a term that described the traditional model in Japan where humans and nature co-existed in harmony. According to Knight (2010a, 433), Satoyama became “a description of the production system rather than the landscape itself.” The discussions on Satoyama conservation on the other hand started to emphasize bringing back Japanese traditions. For example in the Third NBSAPs there is a line that explicitly reflects these observations, “The Japanese traditional wisdom and traditions that co-existed with nature” (Third NBSAP “Strategy,” Chapter 1 “Importance of Principles of Biodiversity”, Section 2 “Biodiversity that supports life,” Part 3 “Diversity of species and culture”).

Alongside these developments, Satoyama started to be depicted as a potential tool for foreign policy as well. This development is most clearly reflected in “the Satoyama Initiative from Japan [to the world].”<sup>122</sup> The Satoyama Initiative was proposed by the Japanese government and launched together with the United Nations University Institute of Advanced Studies (UNU-IAS) at the COP10. The objective of the Satoyama

---

<sup>122</sup> Satoyama Initiative is often referred to in official as well as unofficial documents and interviews as an initiative “from Japan to the world.”

Initiative is to conserve human-influenced natural environments also known as socio-ecological production landscapes through the global recognition of their value (UNU-IAS and Ministry of Environment n.d.). The Satoyama Initiative first appeared in the policy document “Strategy for an Environmental Nation in the 21<sup>st</sup> century” adopted by the government in June 2007. Under the chapter on one of eight main strategies *Enjoy and Inherit Blessing of Nature through Conversation of Biodiversity*, Satoyama Initiative is described as:

We would communicate to the world about Satoyama as an example of a society that co-exists with nature applying our nation’s values on nature and societal and bureaucratic system and at the same time employing the modern knowledge and technology. Furthermore, because there are a number of areas in the world where biodiversity is being lost due to the emphasis on the socio-economic activities, we would call on the revival and further development of the tradition and knowledge to co-exist with nature that are present around the world and name it and propose to the world as the “Satoyama Initiative” and would aim for a society that co-exists with nature that is suited to the nature and social conditions of the world (Government of Japan 2007).

Overall, the “Strategy for an Environmental Nation in the 21<sup>st</sup> century” is not only a strategy for the environment but also for the foreign policy and how to gain and retain a leadership position in Asia and in the world. Although it is an environmental policy document, it is less about domestic environmental issues or how to integrate environmental issues into relevant sector policies.

The foreign policy narratives reflected in the Satoyama Initiative continued to develop up to the COP10 when it was officially launched. The MOE promoted Satoyama not only as a model for harmonious co-existence with nature but also the “Satoyama model” as a means of halting biodiversity loss around the world (Knight 2010a, 432). Furthermore, the official Satoyama Initiative website launched by the Japanese government and the UNU-IAS placed emphasis not only on Japan but also on other countries with “Satoyama-like landscapes,” especially in Asia. The Japanese traditional management system was depicted as *an example* mechanism by which local residents cultivate their environment through agriculture, forestry and fishing activities, and by doing so, Satoyama started to be described less as a Japanese model

but as an Asian tradition. I argue that by extending the understanding of Satoyama in a way that can be applied to an international context, the Satoyama Initiative attempts to create a global relevance.<sup>123</sup>

#### *The Basic Act on Biodiversity*

The Japanese government had adopted three versions of NBSAPs since 1995; nonetheless, the position of these national strategies remained unclear, as there was no legal-base. This was repeatedly criticized by environmental NGOs, such as the WWF-Japan (see e.g. WWF-Japan 2008). Environmental NGOs argued that the ambiguity of the position of the NBSAPs could hinder the effectiveness of the strategy because the government is not legally obliged to implement it or held accountable when the targets of the NBSAPs are not met.

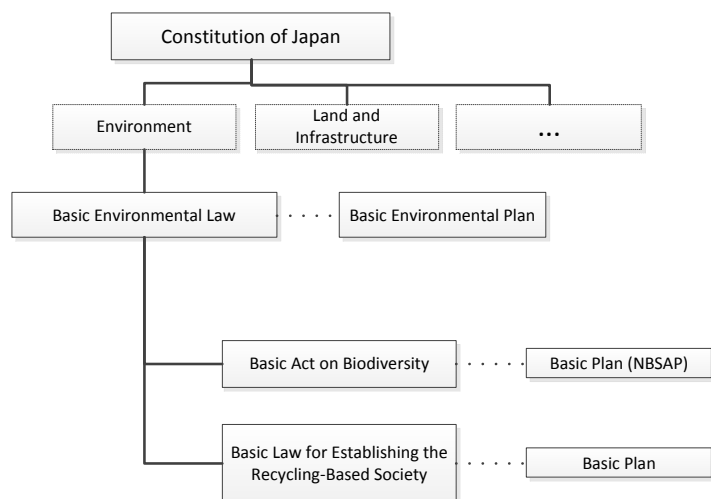
Another concern raised by the groups was the lack of a holistic law concerning the protection of biodiversity or ecosystems: the Wildlife Protection and Hunting Law amended in 1999 did not cover most of the endemic and endangered marine mammals, amphibians, reptiles, marine species or plants. The Law for the Conservation of Endangered Species of Wild Fauna and Flora of 1992 only protected 3 percent of the enlisted endangered species in the Red List. Thus, the existing law cannot adequately protect biodiversity or ecosystems.

The Basic Act on Biodiversity of 2008 addressed these two gaps in the Japanese legal framework. The Figure 6.3 shows where the Basic Act on Biodiversity sits within the Japanese legal system. As the chart shows, the Basic Act on Biodiversity is an overarching law for biodiversity, and together with the Basic Act for Establishing a Sound Material-Cycle Society, it is the succeeding law to the Basic Environmental

---

<sup>123</sup> This argument is also in line with that of Knight (2010a, 434).

Law. Furthermore, the National Biodiversity Strategy and Action Plans serve as a Basic Plan, a type of statutory plan, which is required by law.<sup>124</sup>



**Figure 6.3 Overview of the Japanese Environmental Law**

The Basic Act on Biodiversity is a basic law, which means it does not impose new rules but establishes principles. NGOs, including WWF-J, praised the new law stating, “such policies, which were implemented internationally, but not properly introduced in Japan could be realized [with the Basic Act on Biodiversity]” (WWF-Japan 2008). The Basic Act on Biodiversity was not only the first holistic law on the wildlife, ecosystem and biodiversity in Japan, but also a law that acknowledged the importance of multi-stakeholder processes and coordination and cooperation

---

<sup>124</sup> Article 11 states, “The government shall set a basic plan for conservation and sustainable use of biodiversity (hereinafter referred to as the “National Biodiversity Strategy”) for the purpose of promoting policies for conservation and sustainable use of biodiversity in a comprehensive and planned manner.”

between Ministries and agencies as well as other sectors of the society for the conservation and sustainable use of biodiversity<sup>125</sup>.

The enactment of the Basic Act on Biodiversity is a story on its own. The law did not emerge all of the sudden in 2006, but was based on a lobbying campaign by “National Network that aims for the enactment of Wildlife Conservation Law,” which consisted primarily NGOs but also researchers and scientists. The network’s proposal for a new law was submitted to the politicians back in 2003 (see e.g. WWF-Japan 2008). According to researchers such as Nakayama(2011), the laws in Japan are almost exclusively drafted by the government officials. On the other hand, the Basic Act on Biodiversity was a law that was proposed first by politicians with the push from the National Network of non-governmental official. This shows that there have been gradual changes in the policy system in terms of actors and their power and rules of the game.

#### *The 10<sup>th</sup> Conference of Parties to the CBD (COP10)*

During the COP10, the Parties to the CBD were able to agree on the new Strategic Plan for Biodiversity 2011-2020, including twenty targets for 2020 known as “Aichi Biodiversity Targets,” and the Nagoya Protocol on Access and Benefit Sharing (ABS).

To prepare for the COP10, the Japanese NGOs formed a network called “Japan Civil Network for Convention on Biological Diversity (JCN-CBD)” in 2009. The network consisted of 206 members of which 88 were NGOs all over Japan ranging from the major ones such as the WWF-J or the NACS-J to smaller, local organizations (“Japan Civil Network for CBD” n.d.). They were active before and during the COP10.

---

<sup>125</sup> Article 21 states: “(1) The government shall, for the purpose of properly formulating and implementing policies for conservation and sustainable use of biodiversity, aim at strengthening mutual coordination among relevant ministries and agencies, and endeavor to coordinate and cooperate with diversified bodies, including local governments, businesses, citizens, private bodies and persons who have expert knowledge about conservation and sustainable use of biodiversity. (2) The government shall, for the purpose of reflecting public opinion on formulation of policies for conservation and sustainable use of biodiversity and ensuring fairness and transparency of the process thereof, ask for the opinions of diversified bodies, including businesses, private bodies and persons who have expert knowledge about conservation and sustainable use of biodiversity, and aim at utilization, etc. of a mechanism to form policies after sufficiently considering such opinions.”

The JCN-CBD was a unique initiative for the NGOs in Japan. Prior to the COP10, only major NGOs have participated in the international negotiations; however, the COP10 was their first time to act as a coordinator of international and national NGOs as a host. There were also no official networks formed for the CBD COPs before the JCN-CBD.

Furthermore, for many Japanese NGOs, the COP10 had a symbolic importance. During the COP10, the JCN-CBD proposed the extension of the UN year of Biodiversity to a UN decade of Biodiversity (UNDB) and this was agreed at the COP10. In one of my interviews with an NGO representative who is also a member of the JCN-CBD,<sup>126</sup> he recalled this particular event as follows, “What we proposed to the MOE was adopted at the international level. This was like a truth coming out of falsehood (...). [The NGOs] were able to experience such moment.” Thus, for many members of the JCN-CBD, it was also the first time to experience and live through the COP as an active participant. In addition, through an interview with the coordinator of the Japan Civil Network for Convention on Biological Diversity,<sup>127</sup> the COP10 gave assurance and confidence to the smaller and local NGOs that their activities on biodiversity also had a global relevance and of global interest as those who participated reported back to their local organizations about the COP10.

Following the conclusion of the COP10, the Japanese government started the revision process of the third NBSAPs and the development of the forth NBSAPs. Before the official process started in January 2012, the MOE convened three opinion exchange meetings with NGOs in September, October and November 2011. This was a new format in comparison to the study groups in the previous NBSAPs. A WWF Japan official<sup>128</sup> stated that in these exchange meetings, the MOE were keen on listening to NGO opinions. The exchange meetings focus primarily on how to incorporate the new Aichi Targets into the NBSAPs and it was later incorporated into the official process. Thus, I argue that “Aligning domestic efforts with the developments at the

---

<sup>126</sup> Interview partner J5 (see Table 4.4).

<sup>127</sup> Interview partner J6 (see Table 4.4).

<sup>128</sup> Interview partner J15 (see Table 4.4).

international level” became stronger following the COP10. This is also reflected in official document such as the following:

Based on the below-mentioned background, this revision will be carried out with the aim to have the strategy adopted by the Cabinet by September 2012 so it would be ready before the COP11 that would be held in India in October 2012.

The current NBSAPs covers until 2012 and (2) revision based on the accomplishments of the COP10 is called upon, such as the Aichi Target adopted at the COP10 states “By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan” (Target 17) (Document 1, NBSAP sub-committee, emphasis on the original text)

Furthermore, following the COP10, the IUCN-J launched the “Nijyumaru Project,” which aims to support the implementation of Aichi Target in Japan. It is about aligning the actions and projects against the 20 Aichi Target. Thus, during this period, I observe that there is a growing emphasis on incorporating the international developments into national policymaking as well as foreign policy implications of the international convention. Nonetheless, the actors’ composition does not change in this period. The JCN-CBD officially ended after the COP10, but the same members founded a new network called Japan Civil Network for UN Decade on Biodiversity (JCN-UNCB). This shows that even with same actors involved, policy changes are taking place.

Table 6.3 is an overview of the policy documents in Japan related to the CBD or biodiversity between 1992 and 2011. The overview shows that there have been also developments directly in the policies or legislations.

**Table 6.3 Summary of the major CBD/biodiversity related policy documents between 1992 and 2011**

Year	Policy Document	Title of Summary Booklets (Only when available)
1993	Enactment of Basic Environmental Law – scope has extended to accommodate international developments on the environmental issues	
1995	First NBSAPs	“Towards the Global Environment where All Living Organisms Coexist” (First NBSAPs, booklet)
1997	Amendment of River Law (purpose of the law to include conserving the environment)	
1999	Amendment of Coastal Law (purpose of the law to include conserving the environment) Amendment of Wildlife Protection and Hunting Law (purpose of the law to include conserving the environment) Enactment of Food, Agriculture and Rural Areas Basic Act	
2000	Amendment of Port and Harbor Act (purpose of the law to include conserving the environment) Enactment of Basic Law for Establishing Recycling-based Society	
2002	Second NBSAPs: the basic plan for nature conservation and restoration Enactment of Nature Restoration Promotion Law Amendment of Natural Parks Law (purpose of the law to include conserving the environment)	“Life cannot be (artificially) made” (Second NBSAPs, booklet) <sup>129</sup>
2003	Enactment of the Cartagena Act –on Living Modified Organisms (LMO)	
2004	Enactment of the Invasive Alien Species Act	
2007	Third NBSAPs Strategy for an Environmental Nation in the 21st century	“Life supports each other” <sup>130</sup> (Third NBSAPs, booklet)
2008	Basic Act on Biodiversity –made NBSAPs a statutory plan	
2012	Forth NBSAPs	

<sup>129</sup> Original title was いのちは創れない, translation by author.

<sup>130</sup> Original title was いのちは支えあう, translation by author.



### 6.3 APPLICATION OF THE POLICY ARRANGEMENT APPROACH

In this section, I analyze the policy developments in Japan through the lens of the Policy Arrangement Approach. In the order of discourse, actors, power and rules of the game, I deconstruct the policymaking for the implementation of the CBD in Japan.

#### Discourse

The starting point of the discursive analysis is the discussions surrounding the ratification of the CBD at the National Diet. In these discussions, the CBD is considered to have important foreign policy implication and there was less emphasis on the ecological or environmental aspects of biodiversity. The focus of the narrative is global rather than domestic. In the parliamentary discussions, the CBD is described as an agreement to show that Japan was taking an initiative in global environmental issues. Placing emphasis on foreign policy and global perspective was also reflected in the first NBSAPs of Japan. Moreover, the government had the goal to submit its NBSAPs to the CBD Secretariat before the COP2 in November 1995. The idea of sustainable development emphasizing economic development with limited environmental burden was reflected in the first NBSAPs through the concept of “co-existence.” It conveys the idea that environment and development are not opposing forces but can exist in harmony.

The second NBSAPs became available in 2002, and the discourse surrounding the CBD in Japan and biodiversity saw some changes during this period. The second NBSAPs policy document was more about the status of biodiversity within Japan and less on the foreign policy. In the second NBSAPs, the narrative “co-existence of nature and human” continued to reflect throughout the policy document. However, there were some changes as well. “Nature restoration” became one of the focus areas of the biodiversity strategy. The nature restoration projects are identified as a means to create a society, in which humans could co-exist with nature by conserving biodiversity, and by doing so, contribute to the conservation of the global environment. Nonetheless, my analysis shows that nature restoration in Japan is different from conservation and sustainable use of the CBD. Nature restoration is about restoring an ecosystem that was once lost, and conservation and sustainable

use of biodiversity is about protecting the existing biodiversity. I observe that there are some signs of adapting global norms into local needs and context during this period.

Furthermore, attention on Satoyama started increase during this period within the context of “co-existence of nature and human.” Decrease in the human activities in the Satoyama areas were identified as one of the three threats to biodiversity within Japan. Satoyama, thus, does not concern nature untouched by humans but natural environments modified by humans. Satoyama concept does not view human activities as a destructive force, but it endorses the idea that adequate intervention by humans is also essential for certain ecosystems to exist. The discourse of “co-existence of humans and nature” is extended via new concepts such as Satoyama and nature restoration. In addition, biodiversity slowly started to be depicted as an issue for everyone, and biodiversity as a topic of universal concern started to emerge.<sup>131</sup>

The third NBSAPs was developed in 2007. As reflected in its subtitle “Life supports each other,” the new strategy placed emphasis on the “linkage” between systems and organisms: forest, settlement, river and ocean. Humans are considered a part of the whole of the environment and the discourse of “co-existence” remains strong in this strategy.

Furthermore, while the second NBSAPs had a domestic focus, the third NBSAPs attempted to align the domestic efforts with the international developments. In several of my interviews, both NGOs and government officials<sup>132</sup> described that until the second NBSAPs the Japanese strategies were “a unique Japanese NBSAPs”<sup>133</sup> and the third version was different because it became more internationally focused. This is also reflected in the policy document itself and one of the four pillars of policy in the third NBSAPs is “Taking action with a global perspective.”

---

<sup>131</sup> This was for example clear in one of the interviews with Hiroshi Onodera, the Director General of Nature Conservation Bureau of the MOE.

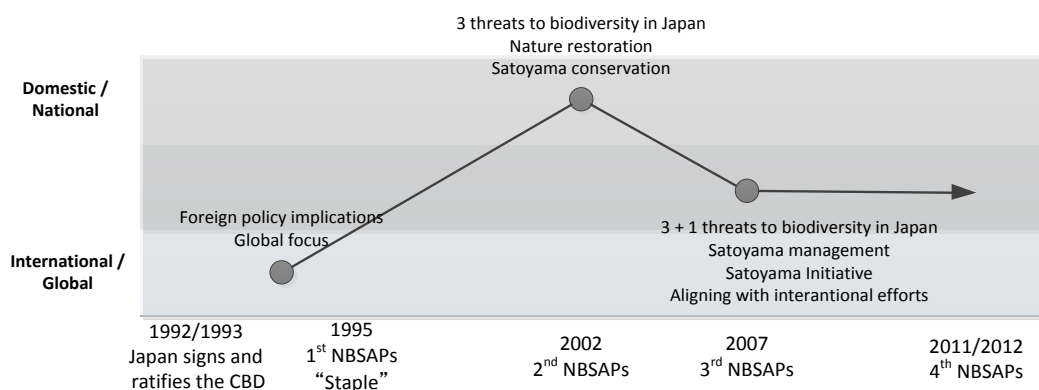
<sup>132</sup> Interview partners J8, J9, J10 (see Table 4.4).

<sup>133</sup> Quote from interview partner J8 (see Table 4.4).

The concept of Satoyama was revised and integrated into this “international” discourse with the launch of the Satoyama Initiative. The concept of Satoyama evolved from an important conservation spot to “the Japanese traditional model,” in which humans and nature co-existed in harmony. The understanding of Satoyama is no longer limited to the description of a landscape, but a type of (sustainable) land management.

Following the COP10 in 2010, discussion on how to align with international efforts became stronger. For example, the revision of the third NBSAPs focuses on ‘Revising it in a way that incorporates the CBD’s post 2010 strategic targets for the period 2010-2020 (“Aichi Targets”).’ Non-governmental actors also launched the “Nijyumaru Project” that aligns projects and initiatives against the Aichi Targets. Through observations and interviews with NGOs, it became clear that certain actors (NGOs and researchers) are acting as an intermediary between the global and national by bringing the decisions at the international level on the national level policy agenda. These actors founded initiatives such as the Nijyumaru Project and actively participate in the discussions on how to incorporate the Aichi Targets of the CBD into national biodiversity strategy in Japan.

Thus largely the discourse in Japan shifted from international/global focus to domestic/national issues and then to combining the international/global with national/domestic issues and efforts and vice versa.



**Figure 6.4** Development regarding the dimension “Discourse” in Japan

## Actors

The actors involved in the process of policymaking for the implementation of the CBD have gone through changes over the last decades both at the micro and macro levels. At the macro level, generally, it evolved from a government-led process to a more multi-stakeholder oriented one.

At the time of ratification in 1993, the Ministry of Foreign Affairs was the main government body responsible for the national implementation and it carried out a legal compatibility check of the CBD against the existing system. The Environmental Agency was not involved in this process.

Following the ratification, the Environmental Agency took over the responsibility to develop a NBSAPs and the implementation of the CBD became an area of concern of the Environmental Agency. It called upon an inter-Ministerial conference to develop the first NBSAPs. However, despite the name “inter-Ministerial,” there was hardly any collaboration between the various Ministry bodies when developing the strategy. Several interviewees such as the WWF Japan official<sup>134</sup> described that the final policy document was merely a collection of what Ministries and Agencies submitted to the Environmental Agency. Although there was a public consultation period for the draft document, NGO officials recalled that the first NBSAPs remained distant to the average population or even to the NGOs.

Since the development of the second NBSAPs, the type and number of actors involved changed. Various Ministries were directly involved and came together in a form of a study group. This indicates that there was more collaboration between the Ministries than the previous strategy. Moreover, the MOE invited scientists and NGO representatives to the study-group meetings so they can share their views and expertise. There were more actors involved in the implementation of the strategy as well and some of the NGOs such as NACS-J actively promote the strategy to the public. Nonetheless, the involvement from the private sector in the NBSAPs process has

---

<sup>134</sup> Interview partner J15 (see Table 4.4).

been limited. With the exception of indirect representation through the IUCN-J,<sup>135</sup> private sector was not an active group in the national biodiversity strategy.

For the private sector, there was a separate process to develop the “Guidelines for Private Sector Engagement in Biodiversity,” which became available in 2009. The process for the guidelines followed a similar step to the NBSAPs and it was based on a multi-stakeholder process inviting NGOs as well as industry representatives. The details are out of the scope of this research. Nonetheless, a business representative<sup>136</sup> stated in an interview that the MOE gave an impression that they are not used to working with the private sector. I observed that the collaboration between the MOE and NGOs remain stronger than the relationship between the MOE and the private sector. Nonetheless, my analysis over time also shows that the relationship between the private sector and the government in terms of the CBD has gone through changes. A CBD expert explained in an interview<sup>137</sup> that at the time of ratification the industry was putting pressure on the government that the industry association would impede the ratification of the CBD in Japan, if the CBD were to put limitation on their economic activities.

At the micro-level, most of the NGO representatives and scientists have not changed since the 1990s. In particular, some of the scientists have been following the CBD prior to 1993. This means they accumulated expertise for over two decades.<sup>138</sup> As for the government side, the officials have changed several times during the last two decades. This is due to the rotation system of two to three years that exist within the Ministry.

Figure 6.5 is a graphic representation of how the actors involved have changed over the last two decades. It shows that over the years, collaboration between MOE, academics and NGOs have increased but the private sector remains outside of the network.

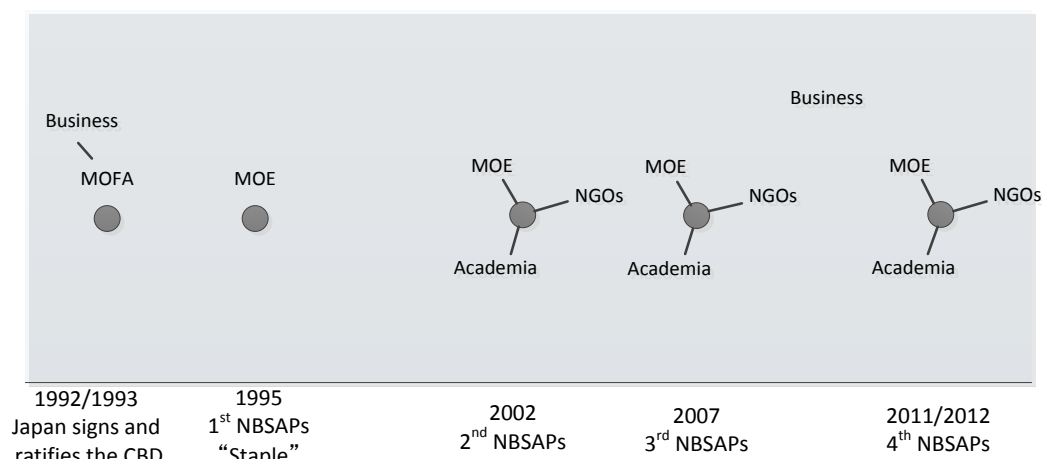
---

<sup>135</sup> The largest industry association in Japan, Keidanren, is a member of the IUCN-J.

<sup>136</sup> Interview partner J11 (see Table 4.4).

<sup>137</sup> Interview partner J13 (see Table 4.4).

<sup>138</sup> Interview partner J13 (see Table 4.4).



**Figure 6.5** Development regarding the dimension “Actors” in Japan

### Power and resources

The power and resources actors involved in the policymaking for the implementation of the CBD have also gone through changes. Within the Japanese governmental bodies, the MOE has more power today than in 1993. The non-governmental actors have also increased their resource and political acceptance.

#### *Environmental Agency / Ministry of Environment*

The Environmental Agency has been a weak government body in comparison to other well-established ministries such as economic affairs or construction. The historical weakness is well documented in previous research (e.g. Knight 2010b, 359–360). In particular, its institutional set up acted as an obstacle for Environmental Agency to gain influence over the other bodies. At the time of its inception in 1971, the staff of the Environmental Agency was appointed from twelve existing ministries, who may or may not have had an interest in environmental issues. In particular, the senior positions of the various divisions were occupied by managers from other ministries in two to three years rotation.<sup>139</sup> This rotation system resulted in the reluctance of upper management to carry out or approve any initiatives or policies that could come into conflict with their native ministries

<sup>139</sup> This observation was shared by first in an interview with an expert in nature conservation policies in Japan (Interview partner J5) and it was later cross-checked with a peer-review journal article on Japanese environmental policy by Knight (2010b, 359)

(Knight 2010b, 359). According to an expert in nature conservation policy in Japan, good or innovative ideas were often suppressed due to the rotation system. In Japan, most of the bureaucrats enter the system straight after graduating from a university and continue to work until retirement, and the administrative system is based on seniority. With these two factors combined, only after approximately thirty years, the upper management such as the Director-General of Nature Conservation Bureau was held by someone who had been working for and made a career within the MOE.<sup>140</sup> Furthermore, a WWF Japan official also explained that although some of the senior position within the MOE are continued to be held in rotation by other Ministries,<sup>141</sup> most of the key position are now occupied internally. My interviews with experts and NGO representatives suggest that these developments have had impact on the policymaking culture at the MOE. Furthermore, according to an expert active in the early 2000s, the Director-General for the Nature Conservation Bureau of the MOE, Hiroshi Onodera, was another symbol of internal changes taking place within the MOE. One of the interviewees<sup>142</sup> also stated that “[MOE officials like Hiroshi Onodera] was able to try out new initiatives or implement policies because they were from the MOE [and not send to MOE from other Ministries].” I argue that these developments have contributed to the increase in power of the MOE.

Furthermore, my observation shows that the financial capacity of the MOE has increased over the years due to the extension in its responsibilities. As briefly explained in earlier parts in this section, the Environmental Agency’s main responsibility was pollution control and management of the national parks when it was first founded, but today the MOE is also in charge of development of national biodiversity strategy, which concerns all Ministries, and nature restoration projects. According to another research, the nature restoration project in particular has increase the budget of the MOE (see Kingston 2004, 148). These projects primarily targeted areas that were destroyed during the large-scale construction boom of the

---

<sup>140</sup> Interview partner J5 (see Table 4.4).

<sup>141</sup> Examples include the head of the office of the wild life protection, department of wild life management and the head of the office of Environmental Impact Assessment, both of which are held by the managers from the Forestry Agency in rotation (J15 Interview).

<sup>142</sup> Interview partner J5 (see Table 4.4).

1980s and 1990s<sup>143</sup> and the restoration projects includes for example decommissioning of dams, restoring coastlines by removing artificial blocks, restoring rivers (re-naturalization of rivers) or wetlands.

The Environmental Agency obtained a ministerial status with the government reform in 2001. This change is often perceived as “not bringing any substantial changes” by NGOs.<sup>144</sup> Nonetheless, other research such as that of Kingston have observed that being a full-pledged ministry has helped the MOE to successfully oppose some of the large scale construction projects (Kingston 2004, 125). Large-scale public construction still persist in Japan; nonetheless, around the turn of the century, the public became increasingly alerted about the extent of accumulated sovereign debt and environmental destruction caused by these public constructions. As a result, during the 2000s politics started to move towards a “deconstruction state” (Kingston 2004, 122–126). These shifts in the public mind-set have also been contributing to the increase in power of the MOE.

#### *Non-governmental actors (NGOs and Academics)*

Previous studies have shown that in comparison to other industrial countries such as the US or Germany, the NGOs in Japan remain weaker in its size, financial capacity or political acceptance (see for example the work of Schreurs 2002, 210–240). Research by Dalton also describe that environmental NGOs in advanced industrial democracies are large and influential actors, but Japan is an exception and the influence of NGOs are weaker in comparison to other industrial countries (Dalton 2009). Despite these observations in previous studies, I argue that the power of non-governmental actors, in the area of biodiversity policy and the policymaking for the implementation of the CBD have increased in terms of resources (financial, political acceptance, and knowledge and information) since 1993. As an example of increased financial capacity, the annual spending of one of the major NGOs in Japan WWF-J has increased by 50 percent in the last decades (see Table 6.4). After the government officially

---

<sup>143</sup> For more details see e.g. Kingston (2004, 122–126).

<sup>144</sup> For example interview partner J15 stated that it was merely a name change.



decided to host the COP10 in Japan, more public funding became available for biodiversity and CBD-related initiatives for the NGOs, according to another NGO official.<sup>145</sup> The Japan Fund for Global Environment is one of the main agencies that provide funding. Another NGO official<sup>146</sup> stated that following the enactment of the Basic Act on Biodiversity, it became easier to get funding for the projects explicitly related to “biodiversity.” The IUCN-J has also increased its financial capacity when they started to collect donations in 2005. Through an interview with an NGO official,<sup>147</sup> I also found out that donations are also contributing to the increase in responsibility of the organization. They feel more accountable to their donors and started to develop the need to show results and action. Thus, the increase in financial capacity has not only increased their power but has also been bringing change in the mind-set of the actors. In addition, I observed that non-state actors became a better-organized force through the creation of issue networks over the years. This has also contributed to the increase in their power.

**Table 6.4 The Number of supporters and annual spending of WWF Japan**

Year	Number of supporters (According to the definition of WWF International)	Annual spending (EUR)
1992	37,370 <sup>148</sup>	-
2003	35,632	ca. 8 million
2007	45,404	ca. 8,7 million
2011	46,618	ca. 11,7 million

The political acceptance of the non-governmental actors is another important aspect of power. My analysis on the policy arrangements over the last two decades show that political acceptance of non-governmental actor have increased. According to a WWF Japan official,<sup>149</sup> the understanding of the NGOs amongst some politicians and

<sup>145</sup> Interview partner J1 (see Table 4.4).

<sup>146</sup> Interview partner J15 (see Table 4.4).

<sup>147</sup> Interview partner J10 (See Table 4.4).

<sup>148</sup> The figure for 1992 was retrieved from Schreurs 2002 page 210. All other figures are based on the Annual Report of the respective years, published by WWF. They can be retrieved from <http://www.wwf.or.jp/aboutwwf/japan/report/> (Accessed on July 12, 2012).

<sup>149</sup> Interview partner J15 (See Table 4.4).

MOE staffs has changed during the last decade and a half. The “Amendment of Wildlife Protection and Hunting Law” of 1999 was one of the events that contributed towards the change in perception of the NGOs. In this event, a network of NGOs and researchers concerned with the original amendment proposed by the Environmental Agency<sup>150</sup> lobbied and successfully influenced the debate in the National Diet. Eventually, it became clear to the Environmental Agency that the original government proposal would be discarded.<sup>151</sup> In the end, the Head of Environmental Agency physically visited the main actors of the network to negotiate the amendment proposal, which signaled the victory for the NGOs in Japan. According to a WWF Japan official, back in 1999, lobbying for nature and wild life at the national level was extremely rare and the politicians or the government bodies did not take them seriously. This success contributed to the change in the mindset of some of the bureaucrats of the Environmental Agency as well as politicians. The non-governmental actors have also gained power through the increased access to information on policymaking. Since the second NBSAPs process, the transparency of the decision-making process significantly increased. These observations show that power is not only in terms of resources but also comes from political acceptance or respect from other actors in the system.

Furthermore, the accumulated knowledge and expertise of non-governmental actors have contributed to their increase in power. Particularly in the case of the CBD, there are only a handful of experts on the topic in Japan. During my fieldwork I found out that the government often relies on the expertise and knowledge of the non-governmental actors. For example, the MOE commissioned one of the major NGOs to write an official report on the COP9 including proposals for national initiatives based on the observation of other countries and at the international level. In fact, my observation and interviews show that the NGOs and researchers are often

---

<sup>150</sup> Skeptics were concerned that the amendment would only ease hunting and would endanger wild life.

<sup>151</sup> According to a WWF Japan official who was one of the leading figures in the NGO movement, the issue caught more attention from the Environmental Agency because having a government proposal discarded in the parliament rarely happens in Japan and therefore it would endanger the position of the Head of Environmental Agency.

acting as an intermediary between the national and international levels. They also interact with governments of other countries, the CBD Secretariat or other non-governmental actors at the international level, and they bring back knowledge and information on what is happening at the international level and they report back to other national level actors.

In addition, the non-governmental actors play an important role in preserving the know-how regarding the policymaking for implementation of the CBD in Japan and in ensuring continuity in the process.<sup>152</sup> Furthermore, I observed that even if the responsible MOE officials for the NBSAPs change, the process on NBSAPs do not drastically change because the NGO representatives are relatively static. In fact, most of the NGO officials have been part of the process since 2001. While observing NGO-MOE meeting, I also heard statements from the NGO side starting with “in the previous NBSAPs process...” to remind the officials and other actors how it was done before. Therefore, I argue that the NGOs are also serving as an important part of institutional memory in Japan in regards to the CBD and NBSAPs.

### **Rules of the Game**

My observations show that the rules of the game surrounding the policymaking for the implementation of the CBD have also gradually changed during the last two decades. In the first NBSAPs, the NGOs did not have an official or unofficial access to the policymaking process. However, from the second strategy onwards, they have been invited by the MOE to be part of the process as experts. In addition, the informal rules have changed, and this was especially after the COP10. More information exchange occurs between the government and NGOs, and the NGOs can exert influence to the official process.

Furthermore, not only NGOs but also researchers' access to decision-making processes have extended. For example, a CBD expert<sup>153</sup> explained in his interview

---

<sup>152</sup> This observation was shared during an interview with a CBD expert (interview partner J13, see Table 4.4).

<sup>153</sup> Interview partner J13 (see Table 4.4).

that researchers' opportunities to sit on committees or act as a consultant for policymaking have increased during the last two decades. In terms of official rules, the advisory body for environmental issues (the Central Environmental Council) was founded in January 2001 creating a new formal access to policy making.

#### 6.4 ANALYSIS AND INTERIM CONCLUSIONS

In the previous section, I analyzed the process to translate of the CBD into the NBSAPs in Japan through the lens of PAA. To sum up, the NBSAPs changed from a government-driven policy document that focused primarily on the environmental aspects to an interdisciplinary policy document concerning environmental, social and economic implications of biodiversity. It is also no longer developed by one government body, but the process involves a number of actors, both governmental and non-governmental ones. Discourse surrounding the CBD and biodiversity changed and became more aligned with the international understanding of biodiversity. Yet new discourses such as Satoyama emerged, which are unique to Japan. New rules were introduced allowing more actors to be part of the policymaking.

In the case of Japan, I argue that international conferences were one of the explanatory factors for the policy change. Several policy developments took place following the decision to host the COP10 in Nagoya. For example, the Basic Law on Biodiversity, which legally recognized the NBSAPs and provided a holistic framework on biodiversity, was adopted in 2007 following the decision to host the CBD in Japan. Furthermore, a number of interviewees, both NGOs and government officials,<sup>154</sup> reported that there was noticeable change from the public and government in support for the CBD following the decision to host the COP10. NGOs' activities also started to focus more on the CBD and biodiversity.

Previous research such as those by Brown Weiss and Jacobson (1998) and Friedman, Hochsteler, and Clark (2005) identified that international conference trigger policy

---

<sup>154</sup> Interview partners J1, J9, J15 (see Table 4.4).

or political changes. My case study also supports this theory but I further argue that this factor is particularly effective in the case of Japan. In my interviews with both academic and NGO officials,<sup>155</sup> they mentioned that “gaiatsu” [external pressure] including that of international conferences was *the* driving force behind policy changes in Japan.

Nonetheless, to argue “gaiatsu” in forms of international conferences as *the* only explanation for all of the developments over the last two decades has its limits. Rather than seeing these developments as abrupt sudden changes, I argue that they are caused by accumulation of small developments and a part of a gradual and incremental change. For example, regarding the Basic Law on Biodiversity, the movement for a comprehensive wildlife law had been present since 1999.<sup>156</sup> When we look at each of the story in detail, other changes have been taking place beneath the surface. Existing rules of the game also play an important role because the actors must first have access to the policymaking processes. In addition to access, political acceptance is a key for NGOs. Otherwise even with the access to the policymaking processes, their voice would not be taken seriously. Nonetheless, at the same time, events such as international conferences create a special opportunity. Kingdon (1984) describe such opportune moments as a window of opportunity and enables advocates to bring a certain agenda forward.

In addition to these two factors, my observation shows that actors matter. The change that occurred between the first and the second NBSAPs was caused by an introduction of a new policy actor, Hiroshi Onodera, who became the Director-General for the Nature Conservation Bureau of the MOE. The new

---

<sup>155</sup> e.g. Interview partner J6 (see Table 4.4).

<sup>156</sup> Approximately forty organizations had come together and formed a Network to Establish a Veritable Wildlife Protection Law in 1999. This group approached political parties to enact a wildlife law and the matter was eventually picked up by the Democratic Party of Japan (DJP). The DJP included the enactment in their party manifesto for House of Councilors election in summer 2007. The result of this election was remarkable in Japanese political history because the Liberal Democratic Party of Japan (LDP) lost the majority to DJP, forming a “nejire kokkai” [twisted parliament]. This victory created a strong will among the politicians of the DJP to fulfill what was promised in the manifesto including the adoption of a comprehensive wildlife law. Details of this event was collected through an interview with a WWF Japan official who was one of the leading figures of the issue network.

Director-General was responsible for the development of the NBSAPs and he was the man behind the idea of using a multi-stakeholder approach in the process. Yet, at the same time using “leadership” or certain new actors in the policy arena as the explanatory factor falls short. One of my interviewees who also knew the Director-General stated that Hiroshi Onodera was also part of a greater picture in the MOE. According to an expert in nature conservation policy in Japan,<sup>157</sup> the MOE was experiencing a generation change in the management around the turn of the century. The generation of Hiroshi Onodera was the one who applied directly to the Environmental Agency and build up a career within the MOE for over thirty years. Most of them worked as park rangers at the beginning of their career and were used to the idea of multi-stakeholder approach towards policymaking. In fact, the successor of the Director-General of 2001 was also equally open towards collaborating with NGOs and using multi-stakeholder approach to policymaking. Furthermore, when I look at the political discourse during this period, the concept of multi-stakeholder approach (*Sankaku*) appears frequently in environmental policy in general and not only in biodiversity related policies.

Based on these observations, I argue that policy developments in Japan were a combination of incremental and gradual changes and sudden changes pushed by event, for example international conferences or personnel change, that created windows of opportunities. I also argue that the non-governmental actors, both NGOs and researchers, have played role in ensuring there is continuity in the policy processes. Since the governmental officials frequently rotate, the role of non-governmental actors has been key in the developments over the years.

However, the role of non-governmental actors have not been only limited to keeping institutional memory. I argue that they have also been acting as an intermediary between the international and national levels. Using their expertise and networks, they follow or actively take part in the discussions and decision-making at the international level and then translate them to the national actors. They choose the

---

<sup>157</sup> Interview partner J5 (see Table 4.4).

relevant topics for Japan, but also translate the concepts in a way that is relevant for Japan such as nature restoration and Satoyama.





## 7. Comparative Analysis

In the last two chapters, I presented how Germany and Japan translated the CBD into national biodiversity strategies. In chapter 7, I go back to my research questions—*how have the countries implemented the IEA at the national level, and what are the domestic factors that shape these processes?* I compare the two cases and highlight the similarities as well as differences.

### 7.1 IMPLEMENTATION OF THE CBD

#### Discourse

For both of the case studies I started with the analysis of the discourse surrounding the CBD and biodiversity. As presented in the earlier chapters, the concept of biodiversity is a term that describes the variability of the living organisms, although the details of the definition are still under debate. The CBD also defines biodiversity in three levels, genetic, species and ecosystems. Although biodiversity was originally a term that described a status of nature, today it has become a political concept with varying values attached. As most apparent in the text of CBD, biodiversity is not only a topic for nature conservation and concern ecology, but also has social as well as economic implications. The meaning and values attached to biodiversity have extended.

At the national level, the narratives surrounding biodiversity evolved in the direction of the CBD in both countries. In Germany, at the time of ratification of the international convention, the government argued that the Federal Nature Conservation Act (BNatSchG) was sufficient to implement the CBD in Germany. The BNatSchG is primarily concerned with nature conservation and not necessarily the sustainable use or access and benefit sharing of biological resources.

This narrow focus on biodiversity extended over the years and in next policy document, National Sustainable Development Strategy published in 2001. Here biodiversity is translated as “Artenvielfalt” (species diversity) (Bundesregierung 2002a, Chapter 5: Biodiversity), but biodiversity also appears in other part of the

strategy namely in the chapters on agriculture (Bundesregierung 2002a, 113–114; 205–206), fishery (Bundesregierung 2002a, 312) and forestry (Bundesregierung 2002a, 311; 315). These changes show that biodiversity is not only treated as a standalone issue, but also a crosscutting one. In the next policy document, the National Biodiversity Strategy of 2007, the integration of biodiversity in other policy areas increases. The strategy document also covers the socio-economic aspects of biodiversity in addition to the ecological aspects. Biodiversity in this case is considered in all relevant policy areas ranging from nature conservation, agriculture, forestry, and fisheries to tourism.

In the case of Japan, biodiversity has also evolved into a multi-dimensional, crosscutting issue. With each revision of the national strategy, the coverage on the socio-economic aspect of biodiversity in the policy document increased. The importance of this aspect of biodiversity is reflected in statements such as, the lack of socio-economic analysis on biodiversity is a point to improve (Ministry of Environment 2007, Preamble). Furthermore, according to the interview I did with a preventative of the Nature Conservation Society of Japan, biodiversity is considered to be a universal concern for all, and everyone from industry groups to nature conservation organizations has a stake in it.

These developments in the environmental discourses of both countries suggest that there is a convergence towards the understanding of biodiversity. Biodiversity is not only an ecological matter but has social as well as economic implications and that it is a multi-dimensional and crosscutting issue.

Yet, at the same time, beneath the surface, my analysis shows that there are other discourses surrounding the concept of biodiversity. This is quite apparent in the case of Japan with the Satoyama discourse and nature restoration discourse. The discourse surrounding Satoyama evolved over the years. It was originally a term that described a landscape in Japan, which is situated between human settlements and the mountains or forests. Satoyama caught the interests of conservation biologists due to the fact that it contains a number of unique species and has a high ecological value. At the same time, Satoyama is endangered due to land-use change primarily caused by decrease in certain human activities such as traditional farming. The

second national biodiversity strategy identifies the decrease of certain activities as a threat to biodiversity in Japan. Satoyama further evolved and started to become a synonym for traditional sustainable resource management where human and nature co-exist. As Knight also describes in her research, Satoyama today is a model of sustainable resource management (Knight 2010a, 426–428). Others such as government bodies also expand the concept of Satoyama. For example, the Japanese government considers Satoyama as a potential soft power for diplomacy as reflected in the policy document “Strategy for an Environmental Nation in the 21<sup>st</sup> century,” which explicitly features the Satoyama Initiative. The policy document is not only a strategy for the environment or nature conservation in Japan, but also how to gain and retain a leadership position in Asia and in the world.

The concept of nature restoration appeared from the second NBSAPs, and it is positioned as one of the three main policies for biodiversity conservation and sustainable use in Japan. Nature restoration is not about mitigating biodiversity loss or sustainably using the resources but actively bringing back “nature” that had been once lost due to human activities so ecosystems can healthy regenerate (Second NBSAPs Chapter 2, Section 4, A). Nature restoration projects are presented as one of the means to achieve “a society in which [humans] could co-exist with nature by conserving biodiversity and by doing so to contribute to the conservation of the global environment” (Article 1, Nature Restoration Promotion Law). As reflected in the national biodiversity strategy and the enactment of the Nature Restoration Promotion Law, nature restoration became a new policy instrument in the early 2000s. Article 8(f) of the CBD attempts to “Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies.” Nonetheless, the Japanese examples of nature restoration convey larger economic and development interests. The two examples show that biodiversity was interpreted and applied in a way that fit the policy needs with its abstractness and vagueness as well as the call to integrate it into “relevant” policy areas, which they do not specify.

On the surface there is convergence of the understanding of biodiversity, yet at the same time, beneath the surface, there are varying discourses that have been adjusted

to serve the needs of the local political, social and economic context. The values and meanings attached to biodiversity have also been extending.

### Actors

In both Germany and Japan, there has been also a convergence in who participates in the policymaking surrounding the implementation of the CBD in their respective countries. In both countries, the more recent national biodiversity strategies and related documents were developed based on a multi-stakeholder approach, whereas in the early 1990s in both countries these were top-down and government-led processes. For the development of the national biodiversity strategies, in both cases the government body responsible for environmental matters (Ministry of Environment and BMU) is the main body, but involves the NGOs and researchers in the process. The NGOs are increasingly perceived as partners of the Ministries responsible for the environment.

At the time of ratification in 1992, in both Germany and Japan, collaboration between governmental and NGOs did not exist. In the documents during the 1990s in Germany, such as the 1995 National Report, the non-governmental actors are depicted as important actors, but at the same time they are described as those carrying out their own activities to support the implementation of the CBD in Germany. This changes in the 2007 NBSAPs and there the NGOs are also depicted as collaboration partners of the government in addition to their individual roles. The example flagship projects featured in the NBSAPs are mostly collaboration projects between the government and NGOs. For example, the “Development and implementation of an international standard for the sustainable collection from the wild of medicinal and aromatic plants” is a project of BMU, BfN, WWF Deutschland, and IUCN-SSC. The “Conservation and protection of the “Green Belt” along the former Iron Curtain as part of our natural heritage and also as a historical monument” is a project of BMU, BfN, federal states and other nature conservation associations. In Japan too, the NGOs are perceived as partners for the environment.<sup>158</sup>

---

<sup>158</sup> See for example, the speech by Prime Minister cited on P.108.

Scientists have also become important actors in policymaking in both countries. Not only economists, legal scholars and political scientists, but also more natural scientists such as biologists are invited to take part in the policymaking. With environmental issues being the discussion, expertise from natural scientists on ecology or biology increased its importance. In Japan, the Ecological Society of Japan was founded in 1953 to promote research in ecology and related areas. According to a senior member of this organization,<sup>159</sup> the Ecological Society of Japan has become more politically active during the last decades and it has also provided input for the NSBAPs. There has been conflict of interests within the members of the Ecological Society of Japan, e.g. some believe that science should not interfere with politics and left the network. Nonetheless, the organization remains politically active, according to a senior member of the organization. Similarly, in Germany, the Network Forum for Biodiversity Research Germany existed since the mid-2000s and currently contributes actively to the policymaking processes related to biodiversity. Representatives from the Network Forum for Biodiversity Research Germany also participated in the NBSAPs process as experts. The Network Forum also carries out capacity-building workshops for natural scientists to prepare them for political processes.

On the other hand, private sector plays a less active role. There have been some initiatives but in general, the collaboration between private sector and the BMU/MOE remains weaker than the one between the BMU/MOE and the NGOs.

Based on these general observations and analyses regarding the actors involved in the national level, I identified that there are some parallels to the developments at international level. First, interviews with NGO representatives in both countries<sup>160</sup> described that the CBD is one of the most open international agreements for the NGOs. A Japanese NGO representative compared to the CBD to Ramsar or Paris Conventions and according to him, the CBD is more NGO friendly.<sup>161</sup> The discussions

---

<sup>159</sup> Interview partner J4 (see Table 4.4).

<sup>160</sup> Interview partners J5 and D5 (see Table 4.3 and 4.4).

<sup>161</sup> Interview partner J5 (see Table 4.4).

on the CBD at the international level also emphasizes that biodiversity policymaking should be based on a multi-stakeholder approach, meaning it should not be only led by the government but involve relevant stakeholders of the society. Through one of the interviews<sup>162</sup> with an NGO representative in Japan, I found out that the national NGOs are using these developments at the international level as a lever to gain access to the policymaking for the CBD at the national level.

Second, the role of natural scientists in biodiversity policymaking and politics is attracting attention at the international level. For example, scholars such as Koetz et al (2008) argue that the lack of an independent scientific body for the CBD one of the factors that makes the CBD ineffective. These discussions at the international level led to the establishment of a new independent scientific body Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) in 2012 (for more information, see Chapter 2). Thus, actors involved in policy making in both Germany and Japan are converging with the developments at the international level.

### **Power**

In both countries, the NGOs increased their power during the last twenty years: they exert more influence on policy outputs in the latest NBSAPs in comparison to the first NBSAPs (Japan) or the first National Report (Germany). Furthermore, their political acceptance has increased. Better-organized force also contributes to the increase in power of the non-governmental actors. In Germany as well as in Japan, there are more issue networks formed around biodiversity and the CBD such as The NGO Network “Biodiversity” of FUE and DNR and the Japan Civil Network for Convention on Biological Diversity.

In addition, my analysis shows that in both countries, the government bodies, BMU and MOE, also benefitted from the NGOs’ increased power, since they could assist the BMU/MOE positions during political bargaining process between the various

---

<sup>162</sup> Interview partner J5 (see Table 4.4).

ministries.<sup>163</sup> For example, during my direct observations of the NBSAPs event in Japan, an MOE official informally thanked the NGOs network for bringing the biodiversity agenda forward in response to the proposed Rio+20 position paper. According to an interview with BfN official, in Germany, the NGOs lobbied politicians so that the NBSAPs would stay on the political agenda.<sup>164</sup> Thus, my analysis also supports previous research that suggest that the BMU was interested in a qualified and coordinated input from the NGOs to back up their own position in inter-ministerial bargaining (cited in Beuermann and Burdick 1997, 92–93).

### Rules of the game

In both of the countries, there were changes to the rules of the game for the NGOs, allowing them to have more access to policymaking processes. In the case of Germany, there was no change to the formal rules concerning the policymaking of biodiversity. However, there were changes to the informal rules. In one of the interviews with a researcher of NeFo stated that as a formal rule, the Federal Nature Conservation Law (BNatSchG) grants rights to legally-recognized nature protection associations to comment on the finished or final draft of a policy or law, but for the national biodiversity strategy it was beyond what was legally granted.<sup>165</sup> The non-state actors i.e. NGOs and scientists were also involved in the preparation of the draft of the strategy. Thus, the non-governmental actors involvement for the NBSAPs is different from the standard commenting on the finished draft.

During the last two decades, Japan built four versions of the national biodiversity strategy and both formal and informal rules for the NGOs changed as well. In the first version of the NBSAPs, there was no official rule that allowed the NGOs to participate in the process. However, the rules surrounding the strategy development changed to allow more participation of the NGOs from the second NBSAPs. The NGOs are not

---

<sup>163</sup> For example, the Ministry responsible for infrastructure may not support nature conservation as much as Ministry responsible for the environment. Thus, there are often political bargaining between the various government bodies.

<sup>164</sup> Interview partner D4 (see Table 4.3).

<sup>165</sup> In addition to the interview, I cross-checked that this was the case in German law as stated in literature such as Martens, Schlemminger and Wissel (2004, 143–145).

only allowed to provide feedback on the completed strategy draft, but also are asked to contribute to the draft itself.

Rules also evolved for researchers. In Japan the Central Environmental Council, an advisory body for environmental issues, was founded in January 2001. Under the Central Environmental Council, a national biodiversity strategy subcommittee was formed. Through an interview with an expert on the CBD, I found out that this new structure allowed researchers and NGOs to gain official access to participate in the process and that overall, the non-governmental actors' opportunities to take part in policymaking have increased during the last two decades in Japan.<sup>166</sup> On the other hand, in Germany there has been a longer history of involving scientists in policymaking. The Council of Experts on the Environment was established in 1971 and the Federal Environmental Office in 1972 as advisory bodies to the deferral administration.

### **Summary**

To sum up, the comparative analysis of the policy arrangements on the process to develop the NBSAPs shows that gradual and incremental changes have been occurring in Germany and Japan. There are similarities between the two cases and there are signs of convergence to the CBD. For example, the understanding of the biodiversity has become more aligned to the CBD to not only include the ecological aspect of it, but also the economic and social aspects of biodiversity. Furthermore, for both countries, biodiversity treated not only as a local matter but a global and international environmental issue.

Policymaking in both cases is also moving away from a top-down process to include more actors in the strategy making. The roles of the NGOs and researchers have been increasing in the process. The changes to the rules of policymaking are enabling the non-governmental actors further access to policymaking. The non-governmental actors have also gained political acceptance from governmental actors and treated as legitimate actors in the policymaking processes. I argue that this is a reflection of

---

<sup>166</sup> Interview partner J13 (see Table 4.4)



increased in power and influence of the non-governmental actors. Furthermore, these changes in power and influence of the non-state actors are benefitting the environmental Ministries in both countries. The non-governmental actors can support the environmental Ministries positions during the negotiations between ministries through lobbying and raising awareness on biodiversity.

Nonetheless, there are also differences in the two cases. For example, the discourse in Japan surrounding biodiversity includes narratives such as Satoyama and nature restoration that does not appear prominently in the German discourse and it is Japan specific. Cultural diversity appears in the German strategy but does not appear in the Japanese narratives. I argue that these are indications of global concepts and norms also being adapted to different national and local contexts.

## 7.2 EXPLANATORY VARIABLES

In the previous section, I showed that incremental and gradual changes have been occurring during the last two decades. However, in both cases, after the governments decided to host the Conference of Parties (COP) in their own country, a number of notable changes occurred. There were more resources available for the environmental ministries as well as for the non-governmental actors. Political will and societal interest in the topic increased. Thus, I argue that international conference functions as a plausible explanatory variable that drives gradual and incremental policy changes.

Previous literature e.g. Brown Weiss and Jacobson (1998) also identifies “major international conferences” as one of the factors that have an impact on the domestic policies. Reimann (2009) argues that hosting the international conference has an impact on the domestic NGOs as well. They both argue that international conference contributes to the increased attention on an issue and create a political will within the country. My cases support Reimann’s observations on international conferences and the COPs held in the own country have brought a diverse range of actors together to align efforts and positions. I observed that the NGOs of Germany and Japan formed networks during the preparation phase of the conference, and many groups began focusing their activities on biodiversity and on the CBD. What is more, in one of my interviews with a coordinator of Japanese NGOs, I found out that the COP event in Japan gave local NGO groups confidence and assurance, because NGOs could then see that their activities as being a part of a larger global cause.<sup>167</sup>

Furthermore, my case studies also show that the international conferences do not only affect political will and actors and their rules, but also have impact on political discourse as well. For example, the understanding of the concept of biodiversity became more aligned with the CBD, especially around when the decisions were made to host the COP in their own countries. Moreover, additional financial resources became available for biodiversity in Germany as well as in Japan.

---

<sup>167</sup> Interview partner J6 (see Table 4.4).

The *fit and misfit thesis* was not 100 percent applicable in my case studies. I argue that this is due to the characteristics of the CBD, i.e. that the text is ambiguous with a lot of room for interpretation. The fit-ness of the CBD to the national context is not as clear as for example an EU Directive. The degree of fit-ness is a matter of interpretation in the case of the CBD. The broad focus of the CBD worked advantageous for the advocates of the CBD and biodiversity since the actors could translate it in a way that fits the national and local context.

Therefore I argue that the advocates of the CBD and biodiversity at the national levels are actors similar to what Malets (2009) and Merry (2006) refer to as intermediaries of the global and national/local levels. For example, change in land-use cause for example through lack of traditional agricultural practices has been identified as one of the drivers of biodiversity loss. Land use change is addressed through the concept of Satoyama in Japan, since land use change is causing biodiversity loss in this area. Satoyama has then been linked to social issues that are high on political agenda such as demographic change and rapid urbanization. To highlight the multitude of possibilities of creating relevance of biodiversity in other policy areas, I found out that Satoyama has also been further applied in the area of international relations as a soft power tool to retain and gain a leadership position in Asia and in the world. Thus, the intermediaries translate the global norms derived from the CBD in a way that fits to the national and local context and by doing so, the intermediaries are also creating relevance of the topic of biodiversity and the CBD. Without them, the CBD and biodiversity could remain seen as a “misfit.”



## **8. Theoretical contribution and policy outlook**

In this chapter, I briefly summarize the findings of my research. I then discuss the theoretical contributions of my results. First, I discuss how the Policy Arrangement Approach (PAA) provides a different perspective than the available literature on the implementation of IEA that focuses on static assessment. Here I argue that the PAA adds value to existing studies by capturing gradual and incremental changes taking place. Despite the critical view on the performance of the CBD, by employing the PAA, I argue that gradual and incremental changes surrounding the implementation of the CBD have been taking place at the national levels, at least for my two case studies of Germany and Japan. Second, I discuss my contribution to the debate on the role of international agreements in combating global environmental issues. I end this final chapter with an outlook.

### **8.1 SUMMARY OF FINDINGS**

Results of the two case studies showed that all four elements of the policy arrangement –discourse, actors, power and rules of the game –have gone through gradual and incremental changes since the ratification of the CBD at the national levels. The four elements also showed signs of convergence towards the CBD. For example, the understanding of biodiversity became broader to include socio-economic aspects of it. In both countries, the process is based on a multi-stakeholder approach, involving non-state actors as well as state actors within the countries. The role of the non-governmental organizations and researchers in national policymaking are also increasing.

Moreover, in both cases there were actors who were playing an important role in the implementation process at the national levels as intermediaries. They translated the international norms conveyed in the CBD for a national context. Some of the ideas within the international agreement are new such as integrating biodiversity into all relevant sectoral and cross-sectoral policies, and these may not fit to the national context. However I found out that the intermediaries were translating them in a way that fits the national context. Furthermore, the intermediaries not only bridge the

international and national levels through the translation, but also act as an important advocate for the CBD at the national level.

Through my interviews with NGO representatives and scientists in both countries, I found out that national and local level actors often rely on expert knowledge and information on the CBD. These experts are the intermediaries of the global and national/local levels. They explain how to interpret what is taking place at the international levels and the relevance to the national levels. Thus, the interpretations of the intermediaries have a large impact at the national level. Furthermore, international conferences can have the potential to increase the political will within a country and bring societal attention to a topic. In the case of Japan, I found out in an interview with a representative from the NGO network that many local actors were encouraged to carry on their activities related to biodiversity after the Conference of Parties held in Japan in 2010. Therefore, based on my observation, I argue that the international conference is giving the national actors confidence that their activities on the topic matter and have a global relevance.

Nonetheless, being an intermediary does not always automatically mean they contribute to goal attainment of the CBD. There are intermediaries who were more critical about the overall consequence of the CBD as well. Their role on the contrary appeared to be discouraging actors to carry out further actions for biodiversity. Thus, the intermediaries that only communicate the negative overall performance of the CBD could also impede further policy developments to take place at the national and local levels. My research shows that there is policy change for the CBD taking place. Thus, I recommend the intermediaries to assess the consequence of the CBD in terms of a process over time and by doing so the intermediaries can encourage rather than discourage national and local actors and their efforts.

## **8.2 THEORETICAL CONTRIBUTION**

My case studies were on the German and Japanese national biodiversity strategies. In the following section, I discuss the theoretical contribution of the results of my research also in terms of generalizability of my findings.

### **Policy Arrangement Approach as a framework to study the consequences of an international agreement**

My two case studies on the implementation of the CBD show that Policy Arrangement Approach (PAA) provides new and important perspectives in order to study the consequences of an international environmental agreement in comparison to the approaches taken by earlier regime scholars. Regime theory is a school within international relations; thus, the unit of their analysis is often limited to nation-states. Although more and more scholars are extending their unit of analysis to micro levels, most research lack the detailed picture of the process of implementations of the agreement at the national level. The PAA in turn allows a systematic reconstruction of this process at the national level. In the cases I studied, there were clear signs of incremental and gradual changes in the four elements of the policy arrangement. By employing the PAA framework, my findings yielded a positive picture of the CBD, which is in contrary to most of the assessments available on the overall performance of the CBD.

The PAA framework can be applied to any other international environmental agreements. This is because most international agreements take decades until they meet the goal. The PAA is able to show whether or not we are heading towards achieving the goals of the CBD. This is important because transformative changes in a system take place with the accumulation of gradual and incremental changes rather than abrupt changes in the system<sup>168</sup>.

### **International agreements as a way to combat environmental problems**

I carried out my research with the assumption that international agreements are required in tackling the global environmental issues (Haas, Keohane, and Levy 1993, 4–8). However, international agreements are not the only means to tackle global environmental issues.

For example, Ostrom (2009) cautions against single policies adopted at the global level to solve the collective action problems of climate change. She argues that this is

---

<sup>168</sup> This argument is in line with the theory of Streek and Thelen (2005).

due to the complexity of the issue at stake and the diversity of actors involved at the various levels. As an alternative to international agreements, Ostrom (2009) proposes a polycentric approach. Polycentric approach means decisions are made and actions taken at multiple levels (Ostrom 2009). Although the CBD is an international agreement, I argue that the CBD has a polycentric approach character. Given the non-concrete language used in the text of the CBD, translation of global norm to national and local contexts is necessary. The ambiguity of the CBD is often considered as a factor that impedes the effectiveness of the agreement, but my research shows that the flexibility allows decision-making and actions at national, regional as well as local levels. Furthermore, unlike EU Directives, which are impacted by *fit or misfit* of the regulations at the EU and national levels (Knill and Lenschow 1998), the CBD is flexible and can be adjusted to the social, cultural or political contexts.

Moreover, even though the goals of the CBD are not as clearly defined as the climate change Kyoto Protocol, actors at the national level still use the CBD and the Conference of Parties as a reference to justify their actions and/or bring biodiversity on the policy agenda. In Japan where the concept of *gaiatsu* (external pressure) is often the source of change, international commitments work as a lever to bring a topic on the agenda. In the case of Germany, external pressure emerged when it decided to host the COP9 in Bonn.

The symbolic importance of the CBD can be extended to all international environmental agreement. However, the impact to the national level may depend on how important external pressure is perceived within the country.

### **Role of intermediaries**

The roles of actors who translate the global norm into the relevant contexts are also important. The actors in my case study are similar to those of “intermediaries” who have been captured in previous literature such as Malets (2009) and Merry (2006). Merry (2006) explores how different actors translate global norms associated with human rights and gender violence into practices in societies and communities where human rights are non-existent as a concept and where gender violence is not defined as a human rights violation. Malets (2009) analyzes the translation of global norms of



sustainable forestry management into specific local practices. At the local level, many global requirements appear unfamiliar and are difficult to implement. Both cases are not about biodiversity and the CBD, but they both highlight the role of intermediaries who navigate between different levels of the governance system. The intermediaries employ local institutions and practices as a resource and facilitate the translation of global norms (Malets 2009; Merry 2006). Thus, I argue that the findings from my case studies can be applicable for other issues and not only limited to the CBD.

The intermediaries of my cases were actors, who understand and follow the international developments and at the same time are advocates of the goals of the CBD of the national level. They translate the global norms of the CBD into the national context and disseminate knowledge and information on the CBD at the national level. Most of the German intermediary actors, such as NGOs and researchers, are active also at the international level, and they sit in various working group and committees at the international level. In comparison, most of the Japanese NGOs played a more passive role in international arena. The Japanese intermediaries collect information and follow the development of the CBD but they are less involved in the shaping of these processes at the international level. For example, in my interview with the IUCN Japan Chair, I found out that the UN decades for biodiversity adopted at the COP10 was a proposal from Japanese NGOs. According to him, it was one of the first experiences the Japanese NGOs actively made a proposal at the international level<sup>169</sup>.

### 8.3 OUTLOOK AND FINAL REMARKS

Through my research, I shed light into the complex of the process of implementation of the CBD at the national level and showed that gradual and incremental changes are taking place in both Germany and Japan. My analyses show that we are heading towards the direction of achieving the goal of the CBD.

The policy arrangement in both countries has evolved greatly over the last two decades. In the 1990s, policymaking surrounding the implementation of the CBD was

---

<sup>169</sup> Interview partner J5 (see Table 4.4).

top-down and a closed process. In the 2000s, non-governmental actors started to be involved in the process. Their role is increasing today, and they gained political acceptance as a legitimate participant in the policymaking process. The collaboration between the NGO sector and the government has become stronger, and researchers are also increasingly involved in the processes. In line with the aim of the CBD to integrate biodiversity in all relevant sectoral areas, the concept of biodiversity became much more multifaceted as ecological, social and economic aspects must be considered. The intermediaries who translate the global norms of the CBD to the national context have been playing an important role in these developments.

Nonetheless, I see that the current system also requires more policy change in order to achieve the integration of biodiversity in all relevant sectoral areas. In Germany and Japan, the current intermediaries of the CBD are primarily actors from the NGO sector. This is not negative per se. However, private sector is not as intensively involved in the national strategies. I observed that the current policy network in Germany and Japan surrounding the implementation of the CBD is small with somewhat closed membership. Regarding the national biodiversity strategies, private sectors are not as involved. There are initiatives to involve the private sector such as the Business and Biodiversity Initiative, which is an international initiative set up by the German government with membership of 24 corporations, and the Japan Business Initiative on Biodiversity, which is a private sector initiative with 34 corporations.<sup>170</sup> Furthermore, there was a separate process to the national biodiversity strategies to develop the “Guidelines for Private Sector Engagement in Biodiversity,” in Japan. Nonetheless, the collaboration between the MOE and NGOs remain stronger than the relationship between the MOE and the private sector. The Ministries of environment are gradually taking on the new role as coordinators of various sectors. In order to integrate biodiversity in all aspects of our activities, involvement of the private sector is equally important.

Last but not the least, although I argue that we are heading towards the direction of achieving the goals of the CBD, concerned scientists and policymakers can raise the

---

<sup>170</sup> The number of members is based on 2010 data.

legitimate question of whether the current pace of change is fast enough to halt the biodiversity loss before reaching the “tipping points.” What my research has also found is that the negative outlook or critical views on the CBD have counter-effects on actors’ motivations to carry out more action for biodiversity. Many national and local level actors rely on expert knowledge and information from the intermediaries, and from them, learn how to interpret what is taking place at the international levels. The interpretations of the intermediaries have a large impact at the national and local levels. Thus, if the intermediaries only communicate the negative performance of the CBD, this can impede further development to take place. International conferences have the potential to increase political will and bring societal attention to an environmental topic. I end this dissertation with a call to the intermediaries of the CBD to have a positive outlook into the future for the CBD and praise more what we have achieved especially on the policy changes over the years. The intermediaries can encourage rather than discourage national and local actors and their efforts.



## Bibliography

- Andresen, S, EL Boasson, and G Honneland, eds. 2012. *International Environmental Agreements: An Introduction*. Abingdon and New York: Routledge.
- Arts, B, and M Buizer. 2009. "Forests, discourses, institutions: A discursive-institutional analysis of global forest governance." *Forest Policy and Economics* 11(5-6): 340–347.
- Arts, B, and P Leroy, eds. 2006. *Institutional Dynamics in Environmental Governance*. Dordrecht, The Netherlands: Springer.
- Arts, B, and JV Tatenhove. 2004. "Policy and power: A conceptual framework between the 'old' and 'new' policy idioms." *Policy Sciences* 37(3-4): 339–356.
- Asahi Shinbun. 2006. "CBD-COP, Nagoya as candidate for 2010." *Asahi Newspaper*.
- Balmford, A et al. 2002. "Economic reasons for conserving wild nature." *Science* 297(5583): 950–3.
- Barzelay, M, F Gaetani, JCC Velarde, and G Cejudo. 2004. "A conceptual framework and methodological guide for research on public management policy change in the Latin American region." In *Strategies for Public Management Reform*, eds. L Jones, K Schedler, and R Mussari. Amsterdam: Emerald, p. 349–370.
- Beuermann, C, and B Burdick. 1997. "The sustainability transition in Germany : Some early stage experiences." *Environmental Politics* 6(1): 83–107.
- Beuermann, C. 2000. "Germany: regulation and the precautionary principle." In *Implementing Sustainable Development*, eds. WM. Lafferty and J. Meadowcroft. New York: Oxford University Press, p. 85–111.
- BfN. 2011. "Bundesprogramm Biologische Vielfalt." Available at: <http://www.biologischevielfalt.de/bundesprogramm.html> [Accessed January 19, 2013].

Birnie, P, A Boyle, and C Redgwell. 2009. *International Law and the Environment*. 3rd Editio. New York: Oxford University Press, USA.

BMU. 1996. "3. Vertragsstaatenkonferenz zum Übereinkommen über Buenos Aires." *BMU Pressrelease 49* (November).

BMU. 1995. *Bericht der Bundesregierung zur Umsetzung des Übereinkommens über die biologische Vielfalt in der Bundesrepublik Deutschland (Drucksache 13/2707)* [Report of the Federal Government on the Implementation of the Convention on Biological Diversity in Federal]. Available at: [http://de.chm-cbd.net/Umsetzung/Nationalberichte/Documents/Bericht\\_DE\\_Umsetzung\\_CBD\\_1995](http://de.chm-cbd.net/Umsetzung/Nationalberichte/Documents/Bericht_DE_Umsetzung_CBD_1995).

BMU. 2005. "Entwurf: Nationale Strategie zur biologischen Vielfalt." Available at: <http://www.uni-muenster.de/BotanischerGarten/Biodiv/NationalStrategiezurBiodiv.pdf>.

BMU. 1998. *Federal Government Report under the Convention on Biological Diversity*. Bonn.

BMU. 2007. *National Strategy on Biological Diversity (English version)*.

Brand, KW. 1999. "Dialectics of institutionalisation : The transformation of the environmental movement in Germany." *Environmental Politics* 8(1): 37–41.

Brown, A. 2011. "Biodiversity." In *Global Environmental Politics: Concepts, Theories and Case Studies*, ed. G Kuetting. London and New York: Routledge, p. 151–163.

Brown Weiss, EB, and HK Jacobson, eds. 1998. *Engaging Countries: Strengthening Compliance with International Environmental Accords*. Cambridge, Massachusetts: MIT Press.

Bundesregierung. 1993. *Act Establishing the Federal Agency for Nature Conservation*.

Bundesregierung. 2002a. *Perspectives for Germany: Our Strategy for Sustainable Development (in English)*. Berlin.

- Bundesregierung. 2002b. *Perspektiven für Deutschland: Unsere Strategie für eine nachhaltige Entwicklung*. Berlin. Available at:  
[http://www.bmu.de/files/pdfs/allgemein/application/pdf/nachhaltigkeit\\_strategie.pdf](http://www.bmu.de/files/pdfs/allgemein/application/pdf/nachhaltigkeit_strategie.pdf).
- Carew-Reid, J, ed. 2002. *Biodiversity Planning in Asia*. Gland, Switzerland and Cambridge, UK: IUCN. Available at:  
[http://www.icem.com.au/02\\_contents/06\\_materials/06-reports.htm](http://www.icem.com.au/02_contents/06_materials/06-reports.htm).
- CBD. 1992. *Convention on Biological Diversity*. United Nations.
- CBD Secretariat. 2011a. "2010 Biodiversity Target." Available at:  
<http://www.cbd.int/2010-target/> [Accessed February 27, 2011].
- CBD Secretariat. 2013. "Aichi Biodiversity Targets." Available at:  
<http://www.cbd.int/sp/targets/> [Accessed July 26, 2013].
- CBD Secretariat. 2012a. "Convention Bodies: Introduction." Available at:  
<http://www.cbd.int/convention/bodies/intro.shtml> [Accessed December 29, 2012].
- CBD Secretariat. 2011b. "Country Profiles - Germany." Available at:  
<http://www.cbd.int/countries/?country=de> [Accessed March 21, 2011].
- CBD Secretariat. 2010a. "Ecosystem Approach." Available at:  
<http://www.cbd.int/ecosystem/> [Accessed August 10, 2012].
- CBD Secretariat. 2010b. *Global Biodiversity Outlook 3*. Montréal. Available at:  
[http://gbo3.cbd.int/media/2721/gbo\\_en\\_web.pdf](http://gbo3.cbd.int/media/2721/gbo_en_web.pdf).
- CBD Secretariat. 2011c. "National Biodiversity Strategies and Action Plans (NBSAPs)." Available at: <http://www.cbd.int/nbsap/> [Accessed July 8, 2011].
- CBD Secretariat. 2012b. "Secretariat: About - Role." Available at:  
<http://www.cbd.int/secretariat/role.shtml> [Accessed December 29, 2012].

- Coleman, WD, and A Perl. 1999. "Internationalized Policy Environments and Policy Network Analysis." *Political Studies* (XLVII): 691–709.
- Conservation International. 2007a. "Biodiversity Hotspots." Available at: <http://www.biodiversityhotspots.org/xp/hotspots/Pages/default.aspx> [Accessed November 30, 2010].
- Conservation International. 2007b. "Biodiversity Hotspots - Japan - Overview." Available at: <http://www.biodiversityhotspots.org/xp/hotspots/japan/Pages/default.aspx> [Accessed December 12, 2011].
- Conservation International. 2007c. "Biodiversity Hotspots - Japan - Unique and Threatened Biodiversity." Available at: <http://www.biodiversityhotspots.org/xp/hotspots/japan/Pages/biodiversity.aspx> [Accessed December 12, 2011].
- Dalton, RJ. 2009. "Economics, environmentalism and party alignments: A note on partisan change in advanced industrial democracies." *European Journal of Political Research* 48(2gu27): 161–175. Available at: <http://blackwell-synergy.com/doi/abs/10.1111/j.1475-6765.2008.00831.x> [Accessed August 24, 2010].
- Deutscher Bundestag. 2006. *Deutschlands Verantwortung national und international mit einer umfassenden Strategie zur biologischen Vielfalt wahrnehmen*. Berlin: Deutscher Bundestag 16. Wahlperiode.
- Doyle, U, C von Haaren, K Ott, T Leinweber, and C Bartolomäus. 2005. "Noch fünf Jahre bis 2010 -eine Biodiversitätsstrategie für Deutschland [only five more years until 2010 -a biodiversity strategy for Germany]." *Natur und Landschaft* 80(8): 349–354.
- Dryzek, J. 1996. "The informal logic of institutional design." In *Theories of institutional design*, ed. R E Goodin. New York: Cambridge University Press, p. 103–125.



- Dryzek, J. 2005. *The Politics of the Earth: Environmental Discourses*. Oxford & New York: Oxford University Press.
- EC. 2011. "European Commission - Environment - Nature & Biodiversity - Policy." Available at:  
[http://ec.europa.eu/environment/nature/biodiversity/policy/index\\_en.htm](http://ec.europa.eu/environment/nature/biodiversity/policy/index_en.htm)  
[Accessed September 14, 2011].
- EIPP. 2009. *Public Participation in Europe*. Available at:  
<http://www.participationinstitute.org/>.
- Environment goo. 2003. "Key Person interview - Director-General of Nature Conservation Bureau, Ministry of Environment, Hiroshi Onodera (in Japanese)." *Environment goo - online*. Available at:  
<http://eco.goo.ne.jp/business/keiei/keyperson/41-1.html>.
- European Environmental Agency. 2010. "Country assessment - Germany - Landuse." *European Environment - state and outlook 2010*. Available at:  
[http://www.eea.europa.eu/soer/countries/de/soertopic\\_view?topic=land](http://www.eea.europa.eu/soer/countries/de/soertopic_view?topic=land)  
[Accessed September 6, 2012].
- Ferraro, G. 2010. "Domestic Implementation of International Regimes in Developing Countries The Case of Marine Fisheries in China (Dissertation)."
- Foljanty-Jost, G. 2004. "NGOs in Environmental Networks in Germany and Japan: The Question of Power and Influence." *Social Science Japan Journal* 8(1): 103–117.
- Forum Umwelt und Entwicklung. 2012a. "Forum Umwelt und Entwicklung: About us." Available at: <http://www.forumue.de/en/ueberuns/> [Accessed August 31, 2012].
- Forum Umwelt und Entwicklung. 2012b. "Forum Umwelt und Entwicklung: WG Biodiversity." Available at:  
<http://www.forumue.de/en/themen/biologische-vielfalt/> [Accessed August 31, 2012].

- Foucault, M. 1970. *The Order of Things: An Archaeology of the Human Sciences*. London: Tavistock.
- Franklin, JF. 1993. "Preserving Biodiversity: Species, Ecosystem, or Landscapes?" *Ecological Application* 3(2): 202–205.
- Friedman, EJ, K Hochsteler, and AM Clark. 2005. *Sovereignty, Democracy, and Global Civil Society: State-Society Relations at UN World Conferences*. Albany, NY: State University of New York Press.
- Gaston, KJ., and JI. Spicer. 2004. *Biodiversity: An Introduction*. 2nd ed. Oxford: Blackwell publishing.
- Gettkant, A., U. Simonis, and J. Suplie. 1997. *Policy paper 4: Biopolitik fuer die Zukunft*. Bonn. Available at: [http://www.sef-bonn.org/download/publikationen/policy\\_paper/pp\\_04\\_de.pdf](http://www.sef-bonn.org/download/publikationen/policy_paper/pp_04_de.pdf).
- Government of Japan. 2009. *Fourth National Report to the United Nations Convention on Biological Diversity Japan*. Kasumigasei Tokyo, Japan.
- Government of Japan. 2002. "Move of the Prime Minister, Inter-ministerial conference on global environmental conservation - March 27, 2002." Available at: <http://www.kantei.go.jp/jp/koizumiphoto/2002/03/27earth.html> [Accessed January 27, 2013].
- Government of Japan. 2007. *Strategy for an Environmental Nation in the 21st Century [in Japanese]*.
- Haas, P.M., RO Keohane, and MC Levy, eds. 1993. *Institutions for the Earth: Sources of Effective International Environmental Protection*. Cambridge, Massachusetts: MIT Press.
- Haila, Y, and J Kouki. 1994. "The phenomenon of biodiversity in conservation biology." *Finnish Zoological Publishing Board* 31: 5–18.

- Hajer, M A. 1995. *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford University Press, USA.
- Hiwasaki, L. 2005. "Toward sustainable management of national parks in Japan: securing local community and stakeholder participation." *Environmental management* 35(6): 753–64.
- Honneland, G, and A-K Jorgensen. 2003. "Implementing International Agreements in Russia: Lessons from Fisheries Management, Nuclear Safety and Air Pollution Control." *Global Environmental Politics* 3(1): 72–98.
- Hufty, M, and F Muttenter. 2002. "Devoted Friends: The implementation of the Convention on Biological Diversity in Madagascar." In *Governing Global Biodiversity: The evolution and implementation of the Convention on Biological Diversity*, ed. P Le Prestre. Aldershot: Ashgate, p. 279–310.
- Imura, H. 1997. "Japan." In *National Environmental Policies: A Comparative Study of Capacity Building*, eds. M. Jänicke, H. Weidner, and H Joergens. Berlin: Springer, p. 73–88.
- Infrastructure Development Institute - Japan. 1999. *The River Law with commentary by article, legal framework for river and water management in Japan*. Tokyo, Japan: River Bureau Ministry of Construction.
- IUCN. 2012. "Table 1 : Numbers of threatened species by major groups of organisms ( 1996 – 2012 )." Available at: [http://www.iucnredlist.org/documents/summarystatistics/2012\\_2\\_RL\\_Stats\\_Table\\_1.pdf](http://www.iucnredlist.org/documents/summarystatistics/2012_2_RL_Stats_Table_1.pdf) [Accessed December 16, 2012].
- IUCN-J. 2011. "生物多様性条約への取り組みの経緯[How the IUCN-J's projects concerning the CBD came about (in Japanese) ]." Available at: <http://www.iucn.jp/information-about-cbd/details-of-approach-on-cbd.html> [Accessed December 6, 2011].

- Jänicke, M, H Jörgens, K Jörgensen, and R Nordbeck. 2001. *Governance for Sustainable Development in Germany: Institutions and Policy Making*. OECD.
- Jänicke, M., and H. Weidner. 1997a. "Germany." In *National Environmental Policies: A Comparative Study of Capacity Building*, eds. M. Jänicke, H. Weidner, and H Joergens. Berlin: Springer, p. 132–155.
- Jänicke, M., and H. Weidner. 1997b. "Summary: Global Environmental Policy Learning." In *National Environmental Policies: A Comparative Study of Capacity Building*, eds. M. Jänicke, H. Weidner, and H Joergens. Berlin: Springer, p. 299–313.
- Japan Civil Network for CBD. Available at: <http://www.cbdnetjp.org/> [Accessed July 5, 2012].
- Japanese Diet. 1993a. "Diet Session (126th) Sangiin Foreign Affairs Committee no.6 (May 13, 1993)."
- Japanese Diet. 1993b. "Diet Session (126th) Sangiin, Main session no.16 (May 13, 1993)."
- Japanese Diet. 1993c. "Diet Session (126th) Shugiin Foreign Affairs Committee no.6 (April 27, 1993)."
- Joachim, J, B Reinalda, and B Verbeek, eds. 2008. *International organizations and implementation: enforcers, managers, authorities?* London and New York: Routledge/ ECPR.
- Johnston, S. 1997. "The Convention on Biological Diversity: The Next Phase." *RECIEL (The Review of European Community & International Environmental Law)* 6(3): 219–230.
- Jones-Walters, L, and I Mulder. 2009. "Valuing nature: The economics of biodiversity." *Journal for Nature Conservation* 17(4): 245–247. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S1617138109000600> [Accessed November 1, 2012].

- Kato, M. 2001. “国立公園内の土地所有者は公園利用者を排除できるか? 国立公園としての私有地利用の現状と課題 [Can land owners of national parks remove park users?—Limits to and challenges of designating privately owned land for use as national park] (in Japanese).” *Yokohama International Economics Law* 9(3).
- Kingdon, JW. 1984. *Agendas, Alternatives, and Public Policies*. Boston: Little, Brown and Co.
- Kingston, J. 2004. *Japan’s quiet transformation: social change and civil society in the 21st century*. New York and Abingdon: RoutledgeCurzon.
- Knight, C. 2010a. “The Discourse of ‘Encultured Nature’ in Japan: The Concept of Satoyama and its Role in 21 st -Century Nature Conservation.” *Asian Studies Review* 34(4): 421–441.
- Knight, C. 2010b. “The Nature Conservation Movement in Post-War Japan.” *Environment and History* 16(3): 349–370.
- Knill, C, and A Lenschow. 1998. “Coping with Europe: The Implementation of EU Environmental Policy and Administrative Traditions in Britain and Germany.” *Journal of European Public Policy* 5(4).
- Koetz, Thomas, Peter Bridgewater, Sybille van den Hove, and Bernd Siebenhüner. 2008. “The role of the Subsidiary Body on Scientific, Technical and Technological Advice to the Convention on Biological Diversity as science–policy interface.” *Environmental Science & Policy* 11(6): 505–516.
- Krasner, SD. 1983. *International regimes*. Ithaca, NY and Cambridge, MA: Cornell University Press.
- Küchler-Krischun, J, and R Piechocki. 2005. “Der Entwurf der nationalen Strategie zur biologischen Vielfalt, Von konkreten Visionen zu politischen Aktionsfeldern [the draft national biodiversity strategy, from policy visions to concrete action in the various sectors].” *Natur und Landschaft* 80(8): 355–363.

- Lasswell, H. 1951. "The policy orientation." In *The Policy Sciences*, eds. D Lerner and H Lasswell. Stanford, California: Stanford University Press.
- Loreau, M et al. 2006. "Diversity without representation." *Nature* 442(7100): 245–6.
- Malets, O. 2009. "The Impact of Transnational Private Regulation: A Case Study of Forest Certification in Russia."
- Martens, CP, H Schlemminger, and H Wissel, eds. 2004. *German Environmental Law for Practitioners (Series of Legislation in Translation)*. The Hague: Kluwer Law International.
- May, RM, JH Lawton, and NE Stork. 1995. "Assessing extinction rates." In *Extinction Rates*, eds. JHR Lawton and M May. Oxford: Oxford University Press.
- Mazmanian, D, and PA Sabatier. 1983. *Implementation and Public Policy*. Chicago, IL: Scott, Foresmann & Co.
- McGraw, DM. 2002a. "The CBD – Key Characteristics and Implications for Implementation." *RECIEL (The Review of European Community & International Environmental Law)* 11(1): 17–28.
- McGraw, DM. 2002b. "The story of the biodiversity convention: from negotiation to implementation." In *Governing Global Biodiversity: The evolution and implementation of the Convention on Biological Diversity*, ed. P Le Prestre. Aldershot, Burlington, Singapore, Sydney: Ashgate.
- Merry, SE. 2006. *Human Rights and Gender Violence: Translating International Law into Local Justice*. Chicago, IL: University Of Chicago Press.
- Millennium Ecosystem Assessment. 2005a. "Biodiversity." In *Millennium Ecosystem Assessment*, , p. 79–122.
- Millennium Ecosystem Assessment. 2005b. *Ecosystems and Human well-being, Biodiversity synthesis*. Washington D.C., USA.

- Millennium Ecosystem Assessment. 2005c. "Overview of the Millennium Ecosystem Assessment." Available at: <http://www.maweb.org/en/About.aspx#1> [Accessed August 22, 2012].
- Ministry of Environment. 2007. *The Third National Biodiversity Strategy of Japan [in Japanese]*.
- Ministry of Environment - Nature Conservation Bureau. 2001. *For co-existence of people and nature: Nature conservation in Japan. Nature*. Tokyo, Japan.
- Mitchell, RB. 2012. "International Environmental Agreements Database Project (Version 2012.1)." Available at: <http://iea.uoregon.edu/>.
- Morgera, E, and E Tsioumani. 2011. "Yesterday, Today, and Tomorrow: Looking Afresh at the Convention on Biological Diversity." *Yearbook of International Environmental Law*.
- Murakushi, N. 2011. 自然保護と戦後日本の国立公園—続『国立公園成立史の研究』 [単行本]. Tokyo, Japan: Jichosha.
- NACS-J. 2009. *A report on the CBD in 2008 [in Japanese]*.
- Nakayama, M. 2011. "Abundance of Lobbyists in the United States and Absence of Lobbyists in Japan: Policy Formulation Process in Two Countries." In *USJI Seminar, Differences of Policy Formulation Processes in Japan and US Parliaments: Roles of Cabinet, Government Official, Lobbyist, Parliamentarian and Think Tanks.*, Washington D.C. Available at: Conference video available via [http://www.us-jpri.org/en/seminar\\_20111103.html](http://www.us-jpri.org/en/seminar_20111103.html).
- NeFo. 2011. "About NeFo." Available at: <http://www.biodiversity.de/> [Accessed April 18, 2011].
- Nikkei shinbun. 2006. "Demanding the invitation for Biodiversity conference." *Nikkei Newspaper*.

- North, D. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Noss, RF. 1990. "Indicators for Monitoring Biodiversity : A Hierarchical Approach." *Conservation Biology* 4(4): 355–364.
- Office of Technology Assessment. 1987. *Technologies to maintain biological diversity, OTA-F-330*. Washington D.C.: U.S. Government Printing Office. Available at: <http://www.fas.org/ota/reports/8727.pdf>.
- Oikawa, H. 2010. *生物多様性というロジック—環境法の静かなる革命 [Logic of Biodiversity - A quiet revolution in the Japanese environmental law (in Japanese)]*. Tokyo, Japan: Keisoshobo.
- Ostrom, E. 2009. "Background Paper to the 2010 World Development Report: A Polycentric Approach for Coping with Climate Change." (October 2009).
- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge UK: Cambridge University Press.
- Pimm, S.L, GJ Russell, JL Gittleman, and TM. Brooks. 1995. "The Future of Biodiversity." *Science* 269: 347–350.
- Pittock, J. 2010. "A pale reflection of political reality : Integration of global climate , wetland , and biodiversity agreements." *Climate Law* 1: 343–373.
- Prestre, P Le, ed. 2002a. *Governing Global Biodiversity - The evolution and implementation of the Convention on Biological Diversity*. Aldershot, Burlington, Singapore, Sydney: Ashgate.
- Prestre, P Le. 2002b. "Studying the effectiveness of the CBD." In *Governing Global Biodiversity: The evolution and implementation of the Convention on Biological Diversity*, ed. P Le Prestre. Aldershot, Burlington, Singapore, Sydney: Ashgate.



- Prestre, P Le. 2002c. "The CBD at ten : The long road to effectiveness The CBD at Ten : The Long Road to Effectiveness." *Journal of International Wildlife Law and Policy* 5: 269–285.
- Prip, C, S Johnston, and M Vierros. 2010. *Biodiversity Planning: an assessment of national biodiversity strategies and action plans*. Yokohama, Japan: United Nations University - Institute of Advanced Studies.
- Puchala, D. 1975. "Domestic politics and regional harmonization in the European Communities." *World Politics* 4: 496–520.
- Raustiala, K, and A-M Slaughter. 2002. "International Law , International Relations and Compliance." In *The Handbook of International Relations*, eds. W Carlnaes, T Risse, and B Simmons. London: Sage Publications, p. 538–558.
- Reimann, K. 2009. *The Rise of Japanese NGO's: Activism from Above*. London and New York: Routledge.
- Riecken, U., P. Finck, U. Raths, E. Schröder, et al. 2009. "German Red Data Book on endangered habitats (short version, July 2009)."
- Ring, I, Be Hansjürgens, T Elmqvist, H Wittmer, and P Sukhdev. 2010. "Challenges in framing the economics of ecosystems and biodiversity: the TEEB initiative." *Current Opinion in Environmental Sustainability* 2(1-2): 15–26.
- Roginko, A. 1998. "Domestic Implementation of Baltic Sea Pollution Commitments in Russia and the Baltic States." In *The Implementation and Effectiveness of International Environmental Commitments*, eds. David G. Victor, K Raustiala, and EB Skolnikoff. Cambridge and London: MIT Press, p. 575–638.
- Rootes, C. 1999. "Environmental movements : From the local to the global." *Environmental Politics* 8(1): 37–41.
- Rosendal, G.K. 2000. *The Convention on Biological Diversity and Developing Countries*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

- Rosendal, G.K., and PJ Schei. 2012. "Convention on Biological Diversity." In *International Environmental Agreements: An Introduction*, eds. S Andresen, EL Boasson, and G Honneland. New York and London: Routledge, p. 119–133.
- Sabatier, PA, and HC Jenkins-Smith. 1993. *Policy Change and Learning: An Advocacy Coalition Approach*. Boulder, CO: Westview Press.
- Schaefer, H-J. 1995. *Materialien zur Situation der biologischen Vielfalt in Deutschland*. Bonn: BfN.
- Schreurs, M A. 2002. *Environmental Politics in Japan, Germany, and the United States*. Cambridge UK: Cambridge University Press.
- Setoguchi, A. 2009. "Discussing 'nature restoration' - environmental ethics and cognition of history (in Japanese)." In *Environmental Ethics*, eds. S Kitoh and M Fukunaga. Tokyo, Japan: Tokyo University Press, p. 160–170.
- Siebenhüner, Bernd. 2006. "Administrator of global biodiversity: The secretariat of the convention on biological diversity." *Biodiversity and Conservation* 16(1): 259–274.
- Stassen, KR., R. Smolders, and P. Leroy. 2013. "Sensitizing events as trigger for discursive renewal and institutional change in Flanders' environmental health approach, 1970s-1990s." *Environmental health : a global access science source* 12(1): 46. Available at: <http://www.ehjournal.net/content/12/1/46> [Accessed June 20, 2013].
- Stern. 2006. *Economics of climate change: the Stern review*. Cambridge UK: Cambridge University Press.
- Steurer, Reinhard, and Andrè Martinuzzi. 2005. "Towards a new pattern of strategy formation in the public sector: first experiences with national strategies for sustainable development in Europe." *Environment and Planning C: Government and Policy* 23(3): 455–472.

- Streeck, W, and K Thelen, eds. 2005. *Beyond Continuity*. Oxford: Oxford University Press.
- Strijker, D. 2005. "Marginal lands in Europe—causes of decline." *Basic and Applied Ecology* 6(2): 99–106.
- Sweetlove, L. 2011. "Number of species on Earth tagged at 8.7 million." *Nature News*.
- Tils, R. 2007. "The German Sustainable Development Strategy : Facing Policy , Management and Political Strategy Assessments." 176: 164–176.
- Tinker, C. 1995. "A ' New Breed ' of Treaty: The United Nations Convention on Biological Diversity." *Pace Environmental Law Review* 12(262): 191–218.
- Tsubogou, M. 2009. *環境政策の政治学 —ドイツと日本 [Political Science of Environmental Policy - Germany and Japan (in Japanese)]*. Tokyo, Japan: Waseda University Press.
- Uematsu, Y, T Koga, Hi Mitsuhashi, and A Ushimaru. 2010. "Abandonment and intensified use of agricultural land decrease habitats of rare herbs in semi-natural grasslands." *Agriculture, Ecosystems & Environment* 135(4): 304–309. Available at: <http://linkinghub.elsevier.com/retrieve/pii/S0167880909003132> [Accessed November 1, 2012].
- UN Commission on Sustainable Development. 1997. *Implementation of the Convention of Biological Diversity*. New York: CSD 5th Session. Available at: <http://www.un.org/esa/documents/ecosoc/cn17/1997/ecn171997-11.htm>.
- UNCED. 1992. "Agenda 21, Section I Social and Economic Dimensions, Chapter 8: Integrating Environment and Development in Decision-making." *Agenda 21*. Available at: [http://www.un.org/esa/dsd/agenda21/res\\_agenda21\\_08.shtml](http://www.un.org/esa/dsd/agenda21/res_agenda21_08.shtml) [Accessed August 31, 2012].
- Underdal, A et al., eds. 2002. *Environmental Regime Effectiveness: Confronting Theory with Evidence*. Cambridge, Massachusetts and London, UK: MIT Press.

- Underdal, A, and K Hanf, eds. 2000. *International Environmental Agreements and Domestic Politics*. Aldershot, Burlington, Singapore, Sydney: Ashgate.
- UNEP. 2007. *Global Environmental Outlook 3*. Available at:  
<http://www.unep.org/geo/GEO3/english/pdf.htm>.
- UNU-IAS, and Ministry of Environment. "About Satoyama Initiative." Available at:  
<http://satoyama-initiative.org/en/about-2/> [Accessed February 17, 2012].
- Veenman, S, D Liefferink, and B Arts. 2009. "A short history of Dutch forest policy: The 'de-institutionalisation' of a policy arrangement." *Forest Policy and Economics* 11(3): 202–208.
- Verschuren, P, and H Doorewaard. 2005. *Designing a Research Project*. Utrecht: LEMMA.
- Victor, DG., K. Raustiala, and EB. Skolnikoff, eds. 1998. *International Environmental Commitments -Theory and Practice*. Cambridge and London: MIT Press.
- WWF-Japan. 2008. "Basic Act on Biodiversity enacted! Improvement in the legal system [生物多様性基本法が成立！ | 法制度の改善 (in Japanese)]." Available at: <http://www.wwf.or.jp/activities/2008/05/592528.html> [Accessed April 20, 2012].
- Yin, RK. 2003. *Case Study Research*. 3rd ed. London: Sage Publications.
- Young, O. 1994. *International Governance: Protecting the environment in a stateless society*. Ithaca and London: Cornell University Press.
- Young, O, ed. 1999. *The effectiveness of International Environmental Regimes*. Cambridge, Massachusetts and London, UK: MIT Press.