

The foreign policy of Brazil and its impacts on civil society: Hydroelectric development in the Amazon

Master's thesis

Rasmus Bondesen

Supervisor: Malayna Raftopoulos

Development and International Relations

Aalborg University

Number of keystrokes: 146.291

Acknowledgements

A special thank you to my supervisor Malayna Raftopoulos for invaluable guidance and being quick to respond to mails when I was in a crisis and for giving usable comments.

Another special thank you to Lærke Thrysøe Nielsen and Jonas Nielsen for our sparring meetings and comments during the process. It has been good to talk to someone who was in the same process as I was myself.

Abstract

The Latin American countries are in a good position to further invest in renewable energy. And recently the governments have shown that they are willing to do so. For example, Costa Rica has been the first in the region to run entirely on green energy for almost a year. Furthermore, the countries are increasingly investing in solar and wind energy.

However, it is still hydroenergy that are the dominate source of green energy. It is mainly Brazil that are investing in the this technology. They are doing so, as part of their foreign policy strategy to become the dominate country in the region. Moreover, the Amazon rainforest are rich in rivers suited for hydroelectric dams. A part from providing stable power to the population, they are also intended to provide power for the main export sectors in Brazil. Mainly the aluminium sector which requires a significant amount of electricity.

The Brazilian government has been one of the driving forces behind the CDM, because they get almost 70% of their energy from renewable sources, and thus are meeting their GEG emission target. Therefore, they can sell carbon credits and earn a significant amount of money to further develop the country. However, this comes with a price for both the environment, but also the people living where the dams are being build. Serving as a case is the Belo Monte. This project has been a symbol for both 'sides' of the conflict. For the government it has been made into a flagship project that are the core at their strategy. For those people who are against hydroelectric dams it is a symbol of the resistance, because of procedure surrounding the approval of the project. If the Belo Monte project is finalised, then it will pave the way for other projects as well.

Using Global Environmental Governance and Power Relations theories these aspects will be explored.

Table of Contents

Acknowledgements	2
Abstract	3
List of abbreviations	6
Introduction.....	7
Renewable energy in Latin America.....	7
Hydroelectricity in Latin America	8
Hydroelectric energy in Brazil.....	9
Chapter summary	10
Methodology	11
Ontological considerations.....	12
Epistemological considerations	12
Choosing the research method	12
Critique of case study as research method	13
The quality of the research methods	13
Holistic or embedded	15
Research strategies	15
Deductive and inductive theory	15
Qualitative method.....	16
Data collection.....	17
Info about sources.....	17
Theory selection	17
Limits of project/research	18
Theory.....	19
Global Environmental Governance Revisited.....	21
Actors.....	21
Mechanisms.....	22
Interlinkages and fragmentations	25
Power relations.....	26
Stewart Clegg's Circuits of Power	28
Outflanking	31
Analysis.....	33
Environment moving up the global agenda	33
History of UNFCCC.....	36

Brazilian government	38
Deforestation.....	41
Clean Development Mechanism and Kyoto negotiations	45
Paris agreement.....	47
Hydroelectric dams in Brazil	48
Policy towards dams under Lula and Dilma	48
Construction of dams	51
Environmental activism in an historical context	54
Power relations.....	54
Circuits of power	54
Conclusion	61
What factors have contributed to the increase in hydroelectricity in Brazil since 1997-2017?	Fejl!
Bogmærke er ikke defineret.	
And what impact has hydroelectric development had on civil society? ..	Fejl! Bogmærke er ikke defineret.
References	64

List of abbreviations

LA = Latin America

GEG = Global Environmental Governance

PR = Power Relations

UNFCCC = United Nations Framework Convention on Climate Change

CDM = Clean Development Mechanism

ES = Energy Security

TE = Theory of Externalities

NGO = Nongovernmental Organisation

UNEP = UN Environmental Programme

COP = Conference of the Parties

BASIC group = Brazil, South Africa, India and China

GHG = Greenhouse Gasses

CER = Certified Emission Reduction

WB = World Bank

PSDB = Brazilian Social Democracy Party

IBAMA = Brazilian Institute of the Environment and Renewable Natural Resources

IACHR = Inter-American Commission on Human Rights

OAS = Organisation of American States

UNDRIP = UN Declaration on the Rights of Indigenous Peoples

FFPP = Foundation for Life, Production and Preservation

Introduction

Renewable energy in Latin America

The ambitions of many Latin American countries are to position the region as a leader in renewable energy. The countries are increasingly investing in renewable energy projects and adopting new energy regulations to be able to mitigate climate change actions. This is a response to the growing threat from climate change (Olalla 2017). Furthermore, the Latin American countries have an interest in investing in green energy sources, because the region is one of the most vulnerable regions in world, especially regarding the Amazon rainforest. In 2017 alone, there has been several devastating hurricanes, floods and droughts in the region. For example, the hurricanes Irma and Maria which caused extensive damage in the Caribbean. In Peru several people died because of the increasing severity of floods. These are just some examples of the increasing natural disasters in the region that are linked to climate change. They pose another objective for the increasing investment in renewable energy. Uruguay is investing heavily in solar and wind energy, and is projected to become a wind power powerhouse, and Costa Rica was first Latin American country to run entirely on renewable energy for 250 days (Olalla 2017).

However, it is not only Uruguay that is investing heavily in solar energy as Mexico and Chile are also heavily involved. For example, Chile has the biggest solar energy powerplant in the region (El Romero). It can produce enough energy for 240,000 Chilean homes. At the commercial level, Chile is also promoting green energy as Google Chile gets 100 percent of its energy from the El Romero solar power plant. At the beginning of 2017 Mauricio Macri, president of Argentina, made a statement that Argentina would generate 8 percent of its total energy output from renewable energy for the remainder of 2017 (Olalla 2017).

Furthermore, Colombia was awarded the Momentum for Change award at the COP23 in Bonn, Germany. The reason for this was that the government cooperated with scientists from the International Center for Tropical Agriculture. Ecuador was awarded the Impulse for Change award for creating the Sustainable Agriculture with Inclusion and Participation of Gender (Olalla 2017)

However, it is not only at the government level that there is high ambitions. Some of the biggest cities in Latin America such as Rio de Janeiro, Buenos Aires, Quito, Caracas, Mexico City and Santiago de Chile participated in global alliances amongst 25 global cities at the COP23 in Bonn, Germany.

The objective of the alliance is to work harder to implement projects to mitigate the impacts from climate change before 2020 (Olalla 2017).

Hydroelectricity in Latin America

Hydroelectricity is an important source for energy in Latin America (LA) as it accounts for almost half of the combined energy output which is more than all other renewable resources combined. Especially countries that count on commodity prices rely heavily on this source because it allows for more energy independence. It is also because of the high amount of hydropower that the Latin American countries have the world's cleanest energy mix. Furthermore, there is great investment potential in hydroelectric projects. It is expected that by 2035 there will be added capacity worth \$250 billion (Garrón 2017).

However, this is a challenge for the public sector and an opportunity for the private sector. The private sector has become an important factor because of the increasing investments from private corporations. However, public-private arrangements are expected to play an important role in realising future projects and attracting investment (Garrón 2017).

One of the reasons why Latin American countries are investing in hydropower, is because the region is well suited for this renewable energy.

“It has five of the world's most important rivers (the Amazon, Orinoco, Río Negro, Paraná and Río Madera), three of world's biggest lakes, and in Brazil alone, a fifth of the planet's water resources) (Garrón 2017)

And these places have a great potential for further constructing hydroelectric projects because their full potential have not yet been exploited. It is estimated that only 20 percent of the potential has been exploited.

Hydropower is one of the key components to meet the rising energy demand in Latin America because it is a safe and stable power supply. However, the countries face some difficulties because they need to consider economic, environmental and social factors. As the case with Belo Monte later in this thesis shows, this is not an easy task. However, the Itaipú hydroelectric plant at the border between Brazil and Paraguay is an example that it is possible. The plant supplies 17 percent of the energy in Brazil and 76 percent of the energy in Paraguay. It is an example of how to manage

and improve the environment and it is considered one of the world's greenest energy projects (Garrón 2017).

The percentage of hydropower in the total energy output varies significantly. Chile and Argentina get around 30% of their electricity from hydropower while Brazil, Venezuela and Colombia gets 60-70% (Worldenergy.org 2016).

Hydroelectric energy in Brazil

Today, Brazil is the world's third largest producer of renewable energy behind China and the US and has the world's second largest hydropower capacity after China. Brazil has a very different approach to hydropower. They rely on large dam complexes rather than a series of smaller dams. 80% of the total energy output in Brazil comes from hydroelectricity.

Brazil has a huge potential for hydroelectric energy. They have 158 plants in operation, 9 plants under construction and 26 authorized to be build. Furthermore, the Itaipú plant used to be the biggest in the world, but the Chinese plant Three Gorges became the world's biggest in 2009 (Duran 2015).

Hydroelectricity has secured Brazil a steady and reliable supply of energy, and it has helped the industrialisation and urbanisation. However, it has had a negative impact on the society and the environment. Even though hydroelectric power is viewed as a green energy, it has serious environmental impacts as well as social. These impacts occur in the construction of the dams. The lakes that the dams need, are often made by flooding indigenous people's land (Duran 2015).

In Brazil, there has always been a notion about the need to balance environmental protection with the exploitation of natural resources. Over the last decade there has been a significant industrial expansion, of especially the agricultural sector with social and environmental costs. This industrial expansion has made it necessary to expand the electrical generation as well. This has been done in often vulnerable regions, such as the Amazon (Riethof 2016, 20).

One of the most controversial hydroelectric projects are the Belo Monte Dam in Brazil. It will be the world's third-largest dam when it's completed. It has drawn a sharp line between local populations and national -and international environmental organisations against companies and the government of Brazil. The last two are focused on growth and economic development. This project is highly controversial, and it has been hindered by mass mobilisations, several court cases and

strikes. Furthermore, experts have been highly critical of the social and environmental assessments made prior to the construction (McNeish and Borchgrevink 2015, 13). Despite of these obstacles, the federal government are still determined to complete the project. There are many projects like the Belo Monte, and they all show that even though hydroelectricity is a renewable energy, there is potential for conflict, just like there is in non-renewable energy (McNeish and Borchgrevink 2015, 13).

The construction of the dam forced almost 13 thousand indigenous people of 24 different ethnic groups off of their lands (Duran 2015).

This development of big hydroelectric projects and investment in other renewable energies is a part of Brazil's climate change policy. The ambition is to project its domestic climate change policy onto the global stage by participating actively in climate change negotiations. According to Marieke Riethof, it's through an environmental foreign policy that Brazil can legitimise the ambition to become a global and regional leader (Riethof 2016, 2). The main objective of this ambition is to be at the forefront of climate change governance and renewable energy (Riethof 2016, 9).

Based on this the following problem statement are proposed:

How have Brazil's foreign environmental policy since 1997-2017 impacted hydroelectric development in the Amazon? And what are the consequences for civil society and the environment?

The problem statement is interesting to investigate because Brazil have ambitions to become at least a regional power. And they are attempting to legitimise this through environmental governance. Furthermore, HD's are a controversial subject in Brazil, because of their negative consequences for the environment and civil society. But they are an important part of the Brazilian strategy to become a regional leader (Riethof 2016, 2).

Chapter summary

In the following the structure of the thesis will be outlined.

Chapter 1 will explain the research design and research methods used in the thesis. Furthermore, the chapter will argue why those have been chosen. Chapter 2 will describe the theories of Global Environmental Governance (GEG) and Power Relations (PR) and it will be argued why they have

been chosen for this thesis. More specifically, the chapter will explain the three components of GEG actors, new mechanisms and inter linkages. The chapter will then go on to explain Stewart Clegg's and Michael Mann's versions of Power Relations regarding resistance. Chapter 3 will be the analysis. The analysis will be structured around the problem statement how can Brazil realise it's global leadership ambitions through environmental governance and its environmental foreign policy. To answer this, the theories of GEG and PR will be used. United Nations Framework Convention on Climate Change (UNFCCC) will be used as an actor and the link between Brazil and the Clean Development Mechanism (CDM) will be analysed. Furthermore, the link between Brazil's foreign environmental policy and their stand in climate change negotiations and SDG 13 on climate change will analysed. Furthermore, the link between Brazil's global ambitions and their environmental policy will also be analysed. Then the analysis will go on to analyse the international norms in climate change and if Brazil is abiding by those. After this, the analysis will proceed to analyse whether GEG is multilevel or multipolar and how Brazil is fitting into this.

The last part of the analysis will be about why there is resistance to the Belo Monte and Madeira River hydroelectric projects

Methodology

This chapter will introduce the methodology behind the thesis. It will explain and argue which research method have been chosen. After that, both strengths and weaknesses will be explained, and it will be argued why the research method have been chosen despite of the weaknesses. Furthermore, it will be explained how these weaknesses will try to be avoided. It will also be explained how the quality of the research are ensured.

After that, the units of analysis will be explained, and it will be argued whether they are holistic or embedded. After the research method have been explained and argued for and against, the data collection and types of sources used will be explained. It will also be argued why the theories have been chosen.

At last, the limits of the project and research will be explained. Different other directions the thesis could have taken will be explained, and it will argued why said directions wasn't chosen

Ontological considerations

Alan Bryman (Bryman 2012) suggests there are two ontological positions, objectivism and constructionism. The position followed in this thesis will be constructionism. It's assumed that the image of the dams is a social construct. Both positively and negatively. The government and the corporations building the dams are trying to construct a positive image of the dams. They are providing cheap and stable energy, they are a green energy source thus saving the environment. While environmentalists etc. are trying to construct a negative image of the dams. People are being forced off of their lands, people's lands are being flooded and the dams are destroying eco systems. These positive and negative examples provided here, are just some examples. There are a lot more examples.

Epistemological considerations

Alan Bryman (Bryman 2012) presents two epistemological positions, positivism and interpretivism. The position adopted for this thesis is interpretivism. The differences between the various actors in the decision-making process has to be respected. Their subjective meaning about hydroelectric dams are important, because it influences their actions. If they think that the dams are a good idea, they are advocating for them. If they think they are bad idea, they are advocating against them.

Choosing the research method

In this section, the four main types of research methods will be discussed. On basis of this description, it will be argued why the case study research method has been chosen. Furthermore, a critique of the case study will be provided.

According to David de Vaus (Vaus 2001), case study is a research method. It consists of one or more cases. Each case can see the theory from a different perspective (Vaus 2001, 48-52).

The single case study research method has been chosen for this thesis as the case used to explain the impacts of hydroelectric projects will be the Belo Monte hydroelectric complex. The Belo Monte has been chosen, because it has been made into a symbol of the resistance to the governments development plan. Furthermore, the project is spearheading the governments development plans.

Critique of case study as research method

According to Robert Yin (Yin 2009), there are three common critiques of case study as a research method. The first is that case studies often lack consistency. This can be seen if the investigator has been sloppy or hasn't followed systematic procedures. Another reason for the lack of consistency is that sometimes researchers allow their own opinion to influence their findings and conclusions, thus making the research biased. In the other methods this is more unlikely because there are more specific procedures to be followed. The second critique is that case study research leaves little room for scientific generalisation, because often times single case studies are used. This is also true for the other methods because one can't generalise from one experiment. In order to do so, the researcher need to do more than experiments. This can also apply to case study methods, where multi case study is used. This requires a different form for research design (Yin 2009, 15). The third critique, is that case studies take too long, and the result is massive unreadable documents. According to Yin, this might have been the case in the past, but that doesn't apply to today (Yin 2009, 15).

The quality of the research methods

According to Yin (Yin 2009), there are four tests that can be used to establish the quality of the research;

The first test is to construct validity. This step is challenging to case study research because cases are often chosen from the subjective point of view of the researcher. However, there are some tactics that can be used to construct validity despite of the subjective choosing of cases. The first tactic is to use multiple sources to show the different perspectives on the topic. The second tactic is to establish a chain of evidence. The third tactic is to have the case study report reviewed by other people with knowledge of the topic (Yin 2009, 41-42).

To construct the validity of the thesis, multiple sources from various backgrounds and fields will be used. The focus and angle of the reports and articles will be considered since it has been chosen from subjective point of view of the author. Especially regarding the reports from scientists it's quite important to account for subjectivity, since their research are conducted from their subjective opinion.

The second test is internal validity. Yin makes two points about internal validity. First, that it's mostly a concern for explanatory case studies when an investigator is trying to explain how and why event x led to event y (Yin 2009, 42). The second point is that the concern over internal validity extends to the broader problem of making interpretations. The investigator will interpret what the results were from a specific event, based on interviews or documents collected as part of the case study. Yin poses some questions that an investigator needs to address; Is the inference correct? Have all the rival explanations and possibilities been considered? Is the evidence convergent? Does it appear to be airtight? (Yin 2009, 43). If the research method has answered these questions it has begun to deal with overall problem of making interpretations. To address these questions, Yin proposes some analytical tactics to follow; Pattern matching, explanation building, addressing rival explanations and using logic models (Yin 2009, 43).

To construct internal validity, many different points of views will be included. For example, if one criticises the resistance, an article that praises the resistance will also be included as a counterweight. Furthermore, the questions mentioned above will be in the back of my head when doing my research.

The third test is external validity. This deals with whether the findings in the case study are generalisable. According to Yin most critiques of case studies state that single-case studies offer poor opportunities for generalisation. However, the critics are referring to survey research, which relies on statistical generalisation. Whereas case studies rely on analytical generalisation. In this, the investigator is trying to generalise the findings according to some broader theory. But this generalisation is not automatic. The findings need to be replicated on more cases (Yin 2009, 44). Therefore, the multiple-case study method is more valid than single-case study.

To construct external validity, multiple cases are chosen. In this way, it's easier to generalise the findings from the theoretical perspective. For the two theories used in this thesis, the same cases will be used. The same cases will be used throughout the analysis so it's easier to generalise, and thus, construct external validity.

The fourth test is reliability. The objective of this test is make sure a future investigator will end with the same conclusions. Provided if the later investigator uses the procedures as the first one. Furthermore, the emphasis of this test is to minimise errors and bias in the study (Yin 2009, 45). For the researcher, it's a good idea to use a case study protocol and to establish a documentation database. This way it's easier to deal with a possible documentation problem. Another good idea is to conduct research as if someone were looking over one's shoulder and to make as many steps as operational as possible.

Holistic or embedded

When we have established which research method are going to be used, the unit of analysis must be stated. According to Yin (Yin 2009) there are two types of units; holistic or embedded. Holistic means that there is single unit of analysis. That the case isn't divided into separate units. Whereas, embedded means that the case is divided into several unit of analysis (Yin 2009, 46). This thesis is working from the embedded point of view. The case is divided into several units of analysis. First, we have the global level with the actors, then the mechanisms and lastly the interlinkages and fragmentations. Second, we have the national/local level with the power relations between the actors and the resistance of civil society towards the hydroelectric dams

Research strategies

Deductive and inductive theory

Deductive and inductive research methods are used to explain how the research is conducted. The deductive method works from the general view to the more specific. This is also called a top-down approach. The researcher will begin with thinking about which theory is relevant according to the topic of interest. Then the topic will be narrowed down with the creation of more specific hypotheses that can be tested. The researcher will then start to collect data or observations to address the hypotheses. By this, the researcher further narrows down the topic. At the end, the researcher will be able test the hypothesises with specific data, and to confirm, or not, the original theories used (Bryman 2012, 24).

The deductive strategy is used in this thesis, as opposed to the inductive strategy. I started with a topic of interest, which was sustainable development and the impacts of green energy protects on civil society. I then began to explore which theories could be used according to my interests. When I found the theories, I started to formulate a hypothesis and research questions that would fit into the scope of the theory. With the collection of data, I tested the hypothesis, and confirmed the theory.

I used this method instead of the inductive method, because I could easily find a theory that could fit to my topic of interest. Furthermore, with the amount of various theories already developed, I didn't find it relevant for me to come up with a new one.

Qualitative method

As a research strategy, the qualitative method has been chosen. It has been chosen because it can work interchangeably with the case study research design. This also means that non-numerical data will be analysed (Lamont 2015, 78). As primary sources, both existing analyses and articles from scientists will be used as primary sources. Since I didn't have the opportunity to do my own field research, I need to lean on the work of others. And possibly the field work of others.

However, according to Christopher Lamont, there are some limitations to this strategy that needs to be addressed. First, the analysis and article will always reflect the opinions and standpoints of the author (Lamont 2015, 82). To address this problem, the authors of the documents used, whether researchers or scientists, will need to be from diverse backgrounds and needs to write for different magazines, etcetera. For example, they need to have both positive and negative views of all sides of the problem with hydroelectric dams. Second, the standpoints of the magazines in which the articles and analyses are published must be considered as well. Because this will also reflect the content and conclusions of the articles. Especially their political stand points (Lamont 2015, 82). Therefore, the articles and analytics used in this thesis will come from both Brazilian and international magazines. They will come from both the corporate world as well as from the government and civil society.

According to Lamont the strength of this method is that it can be used to understand the world around us. This is not something which can be done with numerical data, but rather we have to

analyse certain phenomena, events, regions, countries, organisations and individuals (Lamont 2015, 78).

Data collection

This thesis will primarily be based on existing data. Mainly current research from various scholars and scientists. Since Global Environmental Governance specifically states that the point of view of different scientists should be included in the analysis, articles and research from various scientists in the field will be included.

Since Global Environmental Governance and Power Relations includes various different actors, such as corporations, government and civil society the documents are chosen based on the description of these. Regarding civil society, their resistance towards the hydroelectric dams are fundamental, and therefore the documents and research used should focus on that as well.

Info about sources

In the following info about some of the authors used in this thesis will be provided.

Marieke Riethof is lecturer in Latin American Politics at the University of Liverpool. She holds a PhD in Political Science and International Relations with a focus on Latin American Politics from the University of Amsterdam. The focus of her research was focused on political strategies of the labour movement in Brazil including the Latin American regional context (University of Liverpool n.d.).

Philipp Pattberg is a professor at the Institute for Environmental Studies at Vrije Universiteit Amsterdam. The focus of his research has been on global environmental politics, biodiversity, forest and ocean governance. However, his current research focuses on institutional complexity, functional overlaps and fragmentation across environmental domains. Furthermore, he the head of the Department of Environmental Policy Analysis and Brije Universiteit Amsterdam (Vrije Universiteit Amsterdam n.d.)

Theory selection

The theory of Global Environmental Governance has been chosen because there has been an increase in actors on the global scene regarding renewable energy. Furthermore, Brazil have

invested heavily in hydroelectricity. Here, the theory is relevant because it can explain the various dynamics surrounding the building of these dams. It draws on the perspectives of civil society, the corporations building the dams, the government and NGO's. Whereas, Power Relations theory can explain the relations between these. Who is deciding factor? And how and why do the people resist? These questions can Power Relations explain.

Limits of project/research

When analysing the resistance, it would have been obvious to make field research. However, this is not done in this thesis simply because of time and resources.

Various theories and methods could also be used. For example, could the theory of Energy Security have been used. With this, the angle would have been different. It would have been more about why Brazil invests in hydroelectricity. Furthermore, a market analysis of Brazil could also be used, to see the situation from perspective of both companies, but maybe also the Danish state in regard to development aid and Danish expertise. But the angles and theories chosen for this thesis, has all these elements. It takes the point of view both from the Brazilian state, the companies and civil society.

Other countries in Latin America could also have been chosen. Almost all the 'Amazon' countries have hydroelectricity. However, Brazil is the country investing the most money in the technology so it's most relevant to choose this country. Another reason is that the scope and length of the thesis doesn't allow for other countries to be included in the analysis for it to be thorough enough. Likewise, other sources for alternative energy could be included. Like wind energy, solar energy etc. Almost all the Latin American countries are investing heavily in alternative energy, so there are enough to choose from. But for the analysis to be consistent and not too messy, only one form for alternative energy and only country should be included.

In this thesis, there are various other theories that could have been chosen as well. For example, Energy Security (ES) and Theory of Externalities (TE). They have not been chosen, because then it cannot be discussed who is governing the environment. For this, GEG is more relevant. Furthermore, they cannot explain the various actors on both sides and the relations between them. This is also

something GEG can along with PR. But for further research both ES and TE can be used. They can be used to explain why they keep investing in hydroelectric dams and their effect on the local society.

Theory

The theory section will start with an explanation of the theory of global environmental governance. At the end, there will be an operationalisation of the theory. After this, the theory of power relations will be explained, and this chapter will conclude with an operationalisation of the theory.

The reason why these theories has been chosen together, is because global environmental governance is looking more at the global level, while power relations is looking more at the national and local level.

However, in order to understand global environmental governance, an explanation on the emergence of global governance needs to be provided. This is because global environmental governance is a component within global governance.

Global governance has emerged as a response to the incapability for traditional IR theories to explain the multiplicity of the current world order. It draws on aspects from realism, institutionalism, constructivism and pluralism (Lennox 2008, 4).

As stated, none of the paradigms has been able to fully capture the complexity of global governance. Therefore, to conceptualise global governance, we need incorporate various aspects from the realist, institutionalist, constructivist and pluralist paradigms. The conceptualisation should also be based upon Rosenau's concept of global order. This will enhance the comprehensiveness of the conceptualisation.

Victoria Lennox proposes the following conceptualisation of global governance:

“(1) The architecture of the global order is one of anarchy, not as the realist would have it as a constant state of war, rather as an ordered system that is intersubjectively and ideationally constructed by a multiplicity of actors and interests” (Lennox 2008, 10).

Moreover, global governance establishes this order. It's a complex system of independent and interdependent ideas, interests, institutions, actors, movements and relations that are governing.

(2) in global governance, states are active and critical actors. But their position is not as dominant as it once was, and this position will continue to change. Moreover, the centrality of the states is a social construct which is based on consent. A result of this, the relative power, authority and functions of states and possible other actors will be context specific. It will change over time and it will be redistributed and reconstituted. (3) According to Lennox, global governance accounts for significant agency beyond and below the state that engage internationally (Lennox 2008, 10). Among these actors are international NGO's, multinational corporations, international economic institutions and transnational movements. The ideas and identities of the actors are critical in shaping the international system and institutions. On the ideational level, the multiplicity of actors creates the system of global governance. Because ideas and identities dictate behaviours and objectives. These behaviours and objectives will then have an influence on global politics and institutions and vice versa. In the system of global governance, states and other actors takes on particular governance functions to steer the global order. These functions include economic, social, political, environmental or administrative functions. (4) Global governance will adapt and change over time, according to the world order. In the global order, accountability and legitimacy is reached through engaging actors in taking decisions that will affect them. (5) In global governance, power is considered a social construct. The power of certain actors and the distribution of power is determined by whose interests will most likely be attended to by the global order, and the changes over time (Lennox 2008, 10).

In his article *The Political Economy of Global Environmental Governance*, Peter Newell develops global governance, into global environmental governance (Newell 2008).

The theory explores in detail the relationship between global environmental change and the organisations of the global economy. This poses a realignment of the priorities for theoretical research and practical application. Existing approaches are appealing in the sense that they draw on current theoretical assumptions about the role of international institutions, how the international system works and the organisation of global politics. But, if our starting point is that we want to understand the nature of environmental change and to identify the political intervention that is most effective, we must think outside the traditional theoretical parameters (Newell 2008, 511).

There is a need for theoretical innovation, because the patterns of decision-making and authority in the global economy have changed the patterns of environmental governance. Amongst these changes is the widening and deepening in the range of actors that produces environmental harm. But also, who are involved in its regulation (Newell 2008, 511).

There have also been changes in the governance and exploitation of environmental resources. These changes have been made through shifting patterns of production and investment, through changes in standards and institutional authority and through the increase in participation of businesses and civil society actors in debates on global environment (Newell 2008, 511).

The multi-sided and transnational forms for governance is a product of a shift in the relationship between states and markets and between public and private international institutions with authority in the environmental area. To capture these dynamics, we therefore need a new theoretical account (Newell 2008, 511).

However, in their book *Global Environmental Governance Revisited*, Frank Biermann and Philipp Pattberg, revisits Newell's theory, and breaks it down into three core sections; actors, mechanisms and interlinkages and fragmentations (Biermann and Pattberg 2012, 7). According to Biermann and Pattberg these are the core concepts in global environmental governance. In the following these concepts will be elaborated.

Global Environmental Governance Revisited

Actors

According to the concept of GEG, world politics are no longer confined to nation states. Rather, it's characterised by an increasing participation of actors who has largely been active at the subnational level. These actors include private actors such as networks of experts, environmentalists and multinational corporations. Among these actors are also new agencies set up by governments, such as intergovernmental bureaucracies. But this is not the increase in the numbers of actors, but their ability to take part in steering the political system. According to Frank Biermann and Philipp Pattberg, actor is understood as the power of individual and collective actors to change the course of events or the outcome of processes (Biermann and Pattberg 2012, 6). Furthermore, they understand agency as something that are not affiliated with the central government of nation

states. Today, many vital institutions of global environmental governance are either inclusive of, or driven by, a wide variety of nonstate actors. Nongovernmental organisations (NGO's) are cooperating with governments to put international norms into practice. An example of this is that NGO's are helping with the integration of many development assistance programs administered by the World Bank or bilateral agencies. Both for-profit and non-profit private actors are also participating in institutions to address environmental problems without being forced, persuaded or funded by states or other public agencies. For example, in the area of forest and fisheries governance. With this 'agency beyond the state' global environmental governance is different from more traditional international environmental politics (Biermann and Pattberg 2012, 6).

To this new development, there are three elements. First, since the 1980's the number of actors, and the degree of their participation in global environmental governance has increased substantially. Second, the variety and types of organisations have also increased. Apart from governments, intergovernmental bureaucracies, NGO's and business actors have emerged. They can be private rule-making organisations in issue areas such as forest management and biodiversity conservation. Third, organisations that are already established have adopted new roles and responsibilities. For example, intergovernmental bureaucracies have become more independent from the governments that created them in the first place. Another example is that NGO's have taken a different role, by engaging directly in agenda setting, policy formulation and the establishment of rules and regulations (Biermann and Pattberg 2012, 7).

Activist groups play a big role on the international scene. They provide research, monitor the commitments of states, inform governments and the public of the actions of their diplomats and the actions of the negotiating partners. At international meetings, activist groups also give direct feedback to the diplomats involved. When environmentalists carefully orchestrate their campaigns, they are able to change the foreign policy of powerful nation states. As the campaign against the dumping of the Brent Spar oil rig illustrates (Biermann and Pattberg 2012, 7).

Mechanisms

The main theme of this concept, is that the increased participation of nonstate actors, has given the possibilities of new forms for cooperation. This new form, is seen as an addition to the traditional

system of legally binding agreements that are negotiated by states (Biermann and Pattberg 2012, 9).

The mechanisms of norm-setting and norm-implementing has changed over the recent years. This is due to the fact, that a growing number and variety of nonstate actors have become part of these mechanisms. This indicates a shift from intergovernmental regimes to public-private ones. This increases private-private cooperation and policy making. Furthermore, private actors have become partners of governments in implementing international standards. An example of this is the implementation of many programmes for development assistance administered through the World Bank or bilateral agencies (Biermann and Pattberg 2012, 9).

Sometimes, private actors negotiate their own global standards. A clear example of this is the Forest Stewardship Council and Marine Stewardship Council. They are two standard-setting bodies created by major corporations and environmental advocacy groups without direct involvement from governments (Biermann and Pattberg 2012, 10).

The recent research of the mechanisms in global environmental governance, has focused on three research questions. Although separate, they are also overarching (Biermann and Pattberg 2012, 10). The first line of research has focused on the emergence of different institutional arrangements. To address this emergence, different theoretical approaches, and single or comparative case studies, have been offered. These transnational institutions that have emerged, are addressing global environmental problems. But there is a problem with this. According to Biermann and Pattberg (Biermann and Pattberg 2012, 10) most of the theoretical approaches are not tailored specifically to the new governance mechanisms. Those empirical studies made to address this problem, tends to isolate causal factors, or they fail to specify their relationship or the causal pathways in institutional formation. Virginia Haufler (Haufler 2003) argues, that one of the common assumptions is that those transnational institutions that are aiming to regulate business behaviour, emerged as a reaction to increased capital flows across borders and the decline of regulatory capacities of states. Still, the predominant trend in analysing the increasing institutionalisation of nonstate environmental governance, is from a functionalist point of view. However, as Biermann and Pattberg puts it (Biermann and Pattberg 2012, 11), such a demand-based approach is difficult when the aim is to specify who is demanding the establishment of transnational regulation for the establishment of new institutions. In addition to this, there are many studies that fails to account

for the interactions of larger systemic transformations. For example, on the macro level, such as discursive and ideological shifts. Furthermore, they also fail to account for decisive shifts at the micro level, such as new organisational capacities or strategies. Therefore Pattberg (Pattbeg 2005) have argued that alternative explanations for the emergence of international institutions have emerged. Pattberg highlights the interconnectedness of macro and micro conditions. Furthermore, Andreas Nölke (Nölke 2006) argues that resource exchange processes for institution building are important (Nölke 2006). In addition, the level of organisational fields should be the appropriate level of analysis if the aim is to study the emergence and institutionalisation of transnational mechanisms of global environmental governance.

The second line of research have focused on the effectiveness and influence of these new mechanisms of global environmental governance. For example, a central area of analysis has been the regulatory, cognitive and integrative functions of transnational regimes operating in the field of forest politics and corporate environmental management (Biermann and Pattberg 2012, 11).

If there are differences in influence, this can be explained by the types of policies that are applied (two examples of this, is a market-based approach or information-based approach), the regulatory environment of transnational regimes and the support of civil society organisations (Biermann og Philipp 2012, 13).

To this, there are a related line of research. This has studied whether governance mechanisms can close governance gaps. This gap is left by intergovernmental processes like insufficient regulation, implementation or participation (Bäckstrand 2006).

The third line is, the democratic legitimacy and accountability of transnational environmental regimes (Chan and Pattbeg 2008). Dingwerth argues that intergovernmental policy making are being more frequently replaced by institutions. Some see this as more efficient and transparent. But some serious questions arise of the legitimacy of nonstate standard setting. For example, the World Commission on Dams has been able to generate widely accepted standards, which had been difficult to negotiate because of the resistance from affected countries. There are also some that criticises the fact that nonstate actors has been successful in setting standards. They point out the problems with legitimacy in nonstate policy making (Dingwerth 2005).

Interlinkages and fragmentations

The final point of this theory, Biermann and Pattberg argues that global environmental governance is characterised by an increased division of different layers and clusters of rulemaking -and implementation. It's divided in two groups: multilevel governance and multipolar governance. Multilevel governance is supranational, international, national and subnational layers of authority. Multipolar governance is different parallel rule-making systems maintained by different actors (Biermann and Pattberg 2012, 13).

Multilevel: To increase the global institutionalisation of environmental politics, policy making need to occur on national and subnational levels. At the local level, global standards need to be implemented and put into practice. Likewise, norm setting at the global level requires local decision making and implementation. The result of this is the coexistence of policy making between the subnational, national, regional and global levels in more and more areas of issue. This can result in conflicts and synergies between the different levels of regulatory activity (Biermann and Pattberg 2012, 13).

Multipolar: In the international community, global institutionalisation of environmental politics does not occur in the same form across the international community. This can be that amendments, standards and timetables agreed upon globally are not accepted by all parties in the end. This will lead to a multiplicity of sub regimes in the original framework. The clearest example of this multipolarity is human kind's response to global warming. There exist many parallel policy approaches. This may lead to divergent regulatory regimes in global climate governance (Biermann, Pattberg and Asselt, et al. 2009).

These divergent policy approaches pose various problems. First, when there doesn't exist the same form for policies, it may jeopardise the success of policies adopted by various groups of actors (such as individual or groups of countries, or at different levels of decision making. For instance, the Kyoto Protocol from 1997. If USA is not part of this, it may give them incentives to work against it. Furthermore, the possibility of strong economic consequences of strict environmental policies that are adopted by one group of states, can have serious consequences for other policy areas such as the world trade regime (Biermann and Brohm 2005). Another complication, can be that this fragmentation may affect positive linkages between other policy areas. Furthermore, business actors will use differences in the regulatory framework to choose among different levels of

obligation. According to Benvenisti and Downs (Benvenisti og Down 2007), powerful states use this fragmentation to maintain or extend their influence. Their domestic interests are shaping their foreign policy. As a consequence, powerful states have the flexibility to choose the mechanism that best serve their interests. They can even make new agreements if the old ones no longer suit their interests (Biermann and Pattberg 2012, 14).

There are also advantages to this fragmentation. When the institutions are distinct, it allows for testing innovative policy instruments in some states or at various levels of decision making. This regulatory diversity can increase innovation. It can also increase innovation at the level of the firm or public agency, or in the entire system of environmental governance. The most important part of this is the idea of the sharing of innovation (policies, technologies, procedures and ideas) (Biermann and Pattberg 2012, 14).

Power relations

This section will start with a brief account of the various writings on power. Several scholars have written about power, ranging from Nicolló Machiavelli to Anthony Giddens. These will briefly be described, and it will be argued why they haven't been chosen. This section will not provide a full description of the theories, because the work of i.e Michel Foucault or Anthony Giddens are quite extensive. Moreover, the power theories used in this thesis are from Stewart Clegg and Michael Mann. But since they are some of the biggest scholars, their work need to be accounted for, before going into detail with the theories used for the analysis.

Machiavelli and Thomas Hobbes introduced the concept of power. Their work *The Prince* (Machiavelli) and *Leviathan* (Hobbes) are considered classics of political writing. Moreover, the contrasts between the two, represents the two main routes the thinking of power have taken (Clegg 1989). On the one hand, Machiavelli sees power as a means, not a resource. Furthermore, he seeks strategic advantages, i.e. military ones. On the other hand, Hobbes represents the causal thinking about power as a hegemony. He thinks that power is centralised, and it focuses on sovereignty (Sadan 1997, 34).

After the Second World War, the work of Max Weber was the main point of departure in the thinking about power. He continued the Hobbesian rational line and he developed organisational thinking.

Furthermore, Weber linked power with authority and rule. His definition of power was the probability that an actor within a social relationship would be in a position to carry out his will despite resistance to it. So, power is dependent on the person's will, even when there is opposition to it (Sadan 1997, 35).

Robert Dahl (Dahl 1961), continues Weber's definition of power, but instead of connecting it to organisation and its structures, Dahl instead connected it to power within the boundaries of a community. According to Sadan (Sadan 1997), the most important part of Dahl's work is the link between power and ruling elites. In a community, power is exercised by a particular individual. Other individuals are therefore prevented from doing what they prefer to do. In sum, Dahl's definition of power is the ability to make somebody do something that otherwise he or she would not have done (Sadan 1997, 36).

However, as a response to Dahl's definition Peter Bachrach and Morton Baratz (Bachrach og Baratz 1962) developed another model, called the two faces of power. They deal primarily with the overt face of power, which is the way decisions are made. And the covert face of power, which is the ability to prevent decision making. Furthermore, the strategy of mobilising bias to prevent discussion on certain issues are an important component of their theory as well. Bachrach and Baratz calls this the non-decision-making process. Conflicts of power doesn't rise above the public face of power. This power is limited to particular rules, rituals or beliefs that tend to favour the interests of one or more group/s (Clegg 1989).

Steven Lukes (Lukes 2005) developed the model Bachrach and Baratz further (Sadan 1997, 37). He recognised their two-dimensional model with the overt -and covert power but added a new and third dimension. Lukes called this dimension the latent dimension of power. This dimension deals with the relations between political preferences and real interests. According to Lukes, power is about the ability to plant ideas into people's mind that are contrary to their own good (Lukes 2005). One of the biggest writers of power, are Michel Foucault (Foucault 1995). He developed an approach that rejects the existence of an ordered and regulating rational agency. Rather, he believes that there is no source of the actions. There is only an infinite series of practices. According to Sadan (Sadan 1997, 38), the greatest innovation of Foucault is the decentralisation of the position of power.

Anthony Giddens (Giddens 1982) and (Giddens 1984), continued the line of thought of Foucault. Although it was also a critique of Foucault and his predecessors. His theory is called structuration or duality of structure. It's based on his view of power as an important and almost exclusive component of the social structure. It's human agents who exercises the power. They also create the power, and the power influences and limits the human agents. In sum, according to Giddens power is not a quality or a resource of people. It's not a position in social structure. It's a social factor that influences society. and power is also created by human society.

This was a brief account on the history of the concept of power. In the following the work of Stewart Clegg and Michael Mann will be described in more detail, as they will be used in the analysis.

When talking about power relations, it would have been obvious to choose Michel Foucault. However, his theory focuses more on the human being, and the power relations between humans. Therefore, Stewart Clegg's and Michael Mann's versions of power relations has been chosen for this thesis, because it's more in the field of social sciences, whereas Foucault's is more in the humanities.

Stewart Clegg's Circuits of Power

Clegg calls his theory Circuits of Power. It consists of three levels: first is the apparent circuit of power. This level is the visible one. For example, to research what happens in decision-making processes. A human agent exercises power in the traditional way. "*A activates resources and means, and influences B in a way in which B would not have acted were it not for his relations with A*" (Sadan 1997, 49). The second level is described as the social level. It's here that the rules of meaning, membership and belonging are created. This level is more abstract than level 1. Third and last level is the systemic-economic level. At this level, material and non-material resources are created (Sadan 1997, 49).

The context of power is important. For example, real acts of power happen at the first level, meanwhile the advantages and limitations the power creates appears at the second and third level. Furthermore, the second and third levels are complex and contextual, and PR's are exercised in complex and diverse ways. When power is most effective it doesn't struggle against rules and doesn't require special resources for any goal. But the character of PR's, is that of a complexity that

undermines the effectiveness of the power. This makes power relations unpredictable. By using a one-dimensional model of PR's, it will teach us something about the character of the relations between agent A and B. But it will not teach us anything about the context, the field of relations where A and B operate, how this field has an influence on the access to resources of power and the ability by A and B to use these. These types of relations are described at the second and third level. At the second level of power, the central rules of social life are created. If we use a game of chess as a metaphor for the society. In a game of chess, the power of the queen is greater than the power of the knight. It's greater because of the rules of the game. By means of fixed laws, the ability of the queen and knight to take different steps are created. However, certain people have greater space for making various moves. Furthermore, they have the authority to reinterpret the meaning of these rules. The rules give these people greater freedom to activate the rules according to their own interpretation, unlike those who are only permitted a series of predetermined moves, like the queen and the knight. To this, there are several means of resistance. For example, to not agree to the other's game rules. Or to object to the other's interpretation of the rules (Sadan 1997, 50).

At the third level, the power is self-evident, but is not independent. This is the case, because the power moves through the two levels of power where social and systemic integration occurs. This integration determines -and creates the rules and creates the fields where the ongoing power events takes place. This is not the only level where the outcome of resistance to power are based. It is based on the creation of a correct and logical context. A correct and logical context are a norm that is created at the second level. For example, various techniques of production are inclusive and innovative, but at the same time also limiting and dominating. The domination is never fixed and eternal, but rather subject to processes of creation and innovation that can weaken it and to the same extend strengthen it (Sadan 1997, 51).

“Facilitative power originates in the systemic-economic circuit (third level red.), and it creates change and tension, making it possible new organizational forms. In contrast, dispositional power originates in the social circuit (second level red.), and supplies social integration and stability to the power relations (Sadan 1997, 51).

According to this explanation, it will be easier to change the domination structures because they are built and operates in a changing and dynamic circuit of systemic-economic power. Furthermore, in

principle they are more open to change and innovation than structures of social belonging and meaning, which are built at the second level of power (Sadan 1997, 52).

According to Clegg, what is happening at the present is not entirely dependent on what happens on one of the other levels. If human agents want to resist the new opportunities that opens up to them on the third level, it depends on, among other things, efficient organisation. This is made possible with resources from the first and third levels. Mann proposes a term called outflanking and according to Clegg, this term can explain why people obey and agree to be obedient. They do this, because they are surrounded by powerful organisations, that are controlled by others. Organisationally, they are outflanked and lack a collective strategy (Sadan 1997, 52). More about outflanking at the end of this chapter.

For Clegg, power and resistance are two separate terms, although they are interconnected. His circuits of power model, distinguishes between two main kinds of resistance:

“Effective Resistance. This is organized resistance and is very rare: it becomes possible in conditions of victory over organizational outflanking. Such resistance becomes institutionalized as a new power and creates an entirely new field of relations.

Episodic Resistance. This is the most common form of resistance. It generally manifests itself only against the exercise of power:

“it is a resistance which operates in the overt circuit and is conscious only of the circuit of power. Episodic resistance itself actually strengthens the stability of power and confirms representational character. This is resistance on a manifest level, which is based on obedience in the covert (social and economic) circuits which determine the division of resources and the rules of power relations.” (Sadan 1997, 52-53).

These circuits of power, is a theory with a strategic approach to PR. In the field that these circuits, or levels, describe are all possibilities open. None of the sides can maintain advantages or fixed state over a period of time. It's also important to note, that a stormy and dynamic environment, that requires complex resources creates an opportunity for change, and that new groups can be incorporated in the power relations (Sadan 1997, 53).

According to Clegg, because of the rarity of effective resistance by the people, it's proof of the importance of organisation. Furthermore, it can also explain the success of military coups. They are

more successful because of the organisation of the military, rather than of military weapons. Although effective military organisation goes hand in hand with efficient resources.

These three levels, also pose as effective tools to analyse the degree of power achieved in process of resistance. This analysis can be divided into three groups of questions: first, is the questions of the outcome of the process, which occurs at the first level. Second, are the questions of the inner ability created in the course of the process that occurs at the second level. And third, questions about the resources that are available to the different actors in the process of resistance. These questions occur at the third level (Sadan 1997, 53).

Outflanking

Michael Mann developed the concept of organisational outflanking. This concept highlights the extent to which organisational resources are necessary for efficient resistance against power. It also highlights the tools that are necessary to activate said resources. In power relations, those who have the organisational advantage, also have the overall advantage (Sadan 1997, 46).

Therefore, the groups or individuals who have the organisational advantage will always succeed in overcoming those who don't have organisational resources. The principal strategy of this, is what Mann calls organisational outflanking. It's the ability to eliminate resistance with relative few resources, to prevent the groups or individuals to develop their organisational resources and to impose the order that are most desirable to those who are doing the outflanking (Sadan 1997, 46). According to Sadan, a social analysis can prove that the advantage of networks and alliances is based on the type of organisation that were available to them at the time. Collective organisation alone cannot overcome an organisation of power. "In order to produce an effective resistance, people have to acquire the ability to activate a collective organisation (Sadan 1997, 46).

In organisational outflanking the outflankers have the advantage over the outflanked. In a situation of organisational outflanking, powerlessness can be attributed to a lack of knowledge among those who are outflanked. But it's important to note, that there are situations where knowledge is available to the outflanked. They may know they are getting outflanked, but cannot, or are not ready, to get out of the outflanking (Sadan 1997, 46).

If the outflanked surrender because of lack of knowledge, according to Mann, there are various kinds of lack of knowledge. (1) The most common explanation is ignorance.

“There is ignorance which expresses itself in the fact that people do not know the rules of the game: they lack knowledge about developing a strategy and assessing the opponent’s resources. They do not know the rules of behaviour, the agenda, and the meaning of informal behaviour” (Sadan 1997, 47).

However, there is also another form of ignorance which is more profound. This is when people don’t identify the game itself. An example of this, is when a group possess great technological advantages who then encounter the absolute contrary (such as traditional colonialism) (Sadan 1997, 47).

“[(2)] Isolation is a more complex kind of lack of knowledge. It expresses itself in lack of information about others who share the same fate, with whom it is possible to create an alliance in order to resist power” (Sadan 1997, 47).

In this way, organisational outflanking can succeed because isolated resistance is easy to overcome. For example, if protest breaks out in different places at the same time. And if the protesters do not know about each other and don’t form a coalition, it’s easy for the outflankers to overcome the resistance (Sadan 1997, 47). (3) The third type of lack of knowledge is division. This is a central step in the strategy of organisational outflanking. The objective is to isolate resistant groups or individuals. This can happen even though people know about one another, and maybe could form an alliance. Organisational outflanking will take advantage of time and space to isolate groups from one another (Sadan 1997, 48).

It can happen that the outflanked surrender to the organisational outflanking on the basis that they know about their situation. In these cases, the outflanked are also aware of the price of their resistance to the outflanking. Sometimes people think that the price of their resistance will be greater than the benefits they will gain, or just to obtain a positive outcome. According to Mann, another outcome is that the outflanked people are aware of the oppression this outflanking creates in their everyday lives, and that time are working against them and only strengthens the organisational ability by the outflankers (Clegg 1989).

In sum, organisational outflanking is a product of the specific social situation and does not describe a specific form of tactic or mechanism of power. It highlights that a group or individual outside a network lack organisational resources. Furthermore, it highlights why disempowerment is a

common social phenomenon. It explains the powerlessness. It explains that the culture of silence expresses a surrender of the organisationally outflanked. This surrender is based on their knowledge that they are incapable of preventing the outflanking

According to Sadan, this theory is not a central theory of power and powerlessness. Though, it emphasises the important aspects that have accompanied the discussion of power along the way. Organisational outflanking highlights why effective resistance is important. The price paid are high. Therefore, it's important to obtain results and, preferably, in the most efficient way possible. It also highlights the importance of the necessity of active organisational development. This is important so that the outflanked can gain significant achievements while resisting power (Sadan 1997, 49).

Analysis

In the following, Brazil's global ambitions will be explored using the theory of Global Environmental Governance.

The first part of this section will be a historical account over the environmental regime from the first conference in Stockholm in 1972 to the Durban conference in 2017. The second part will be about the CDM's function within the UNFCCC. Furthermore, Brazil's role and influence in this environmental regime will be explored. Part three will be about deforestation in Brazil and its foreign policy towards climate change and development in the Amazon region. Part four is about the CDM and how/why it was created and Brazil's influence on it. Part five is about Brazil's hydroelectric policy under presidents Lula da Silva and Dilma Rousseff and the importance of the CDM in these policies. Lastly, this section of the analysis will conclude with an account of Belo Monte and Santo Antônio/Madeira River hydroelectric complexes.

Environment moving up the global agenda

During the last decades of 20th century, the environment has been included in processes of international norm creation. This should be understood in the broader context of a complex and interdependent global economic system. The overexploitation of the planets natural resources is caused by unprecedented expansion of market-oriented capitalism. The focus of international

community shifted towards the hole in the ozone layer and the potential major impacts of uncontrolled environmental degradation. Therefore, there was an urgent need for comprehensive rules to manage environmental degradation. Since the 1972 Stockholm Conference on the Human Environment, environmental issues have become increasingly more relevant in international politics (Vieira 2013, 373).

The UN Conference of Human Environment in 1972 in Stockholm was created to address the impact of economic development on the environment. Furthermore, it was the first conference on highest level set up by the UN. At the conference, the first set of guidelines and principles towards environmental action were set up. Another major achievement from the conference were that the initial institutional structures for multilateral response and cooperation towards environmental issues were agreed upon. This led to the creation of the UN Environmental Programme (UNEP). At this conference it was the first time that the North/South divide became an important factor in negotiations. This divide would come to define future environmental negotiations. The conference was dominated by developed countries' concerns with demographic development in developing countries, pollution and the management and access to natural resources. The international debate about environmental issues were clearly dominated by developed countries' demands (Vieira 2013, 374).

At the conference, Brazil shared the standpoints of the G77 bloc of developing nations. This standpoint was that the international community could not use international environmental negotiations to slow national development. Furthermore, the developing states argued that environmental protection and economic development could not be separated. They also argued that the developed nations were the ones responsible for the global environmental problems and they defended their sovereignty over natural resources (Vieira 2013, 374).

Twenty years after the Stockholm Conference, there was a conference in Rio de Janeiro. It was at this conference that the concept of sustainable development was created. This conference together with the Brundtland Report strengthened the view that developing states should receive a considerable financial and technological contribution so that they could achieve the goals of economic development and environmental sustainability. It was also at the conference in Rio, that the interdependence between economic and social development and environmental quality gained

widespread recognition and was formally included in the institutional and normative frameworks that states the rules of acceptable behaviour on global environmental issues. Furthermore, the UNFCCC was also signed. At the time by 166 countries, but today 194 have signed it. It was at this conference that the developing countries took a more proactive role in the negotiations. They presented the idea that the global environmental degradation was primarily the responsibility of wealthy countries. They favoured the norm of common but differentiated responsibilities. This implied mandatory carbon emissions cuts by industrial nations (Vieira 2013, 375).

GEG has become more intense since the 1972 United Nations Conference on Human Rights in Stockholm. There are several signs of this trend: the increasing international agreements, number of meetings and number of participants. Though governments have been the primary actors, the number and variety of nonstate actors have increased thus making global governance less focused on states (Bernauer and Betzold 2012, 63).

For governments, sometimes it is cheaper to let NGO's implement the agreements from climate change summits. Sometimes NGO's are in a better position to deliver the desired outcomes because they are present on the ground. Furthermore, they have more specialised expertise that would be hard and expensive for the government to obtain. Without going into too much detail, according to the principles of neoliberalism of a lean state, governments have increased funding to civil society groups and the private sector. These actors have thus become providers of public services in areas of environmental governance. For example, in the area of biodiversity conservation and for generating carbon emissions reductions in return for certified carbon credits (Bernauer and Betzold 2012, 63). The climate change negotiations are also evidence of this trend. There are more than 1,500 nonstate actors participating as observer organisations. These organisations include environmental NGO's, business associations and academic institutions. More importantly, nonstate actors are increasingly being included in government delegations to climate change negotiations. Though the influence of nonstate actors differ from delegation to delegation. However, the fact that nonstate actors are invited to be part of the negotiations are astonishing because they are given a seat at the table. This would not happen in other important global policy areas, such as global trade, financial relations or security negotiations.

Civil society's role in global environmental negotiations and diplomacy can be explained with two arguments:

"[1] Civil society representatives provide valuable information and expertise to governments. This information provision role becomes particularly important when governments face budgetary constraints.

[2] They provide legitimacy to intergovernmental negotiations and thus mitigate the "democratic deficit" in global policy making, which takes place far away from domestic political arenas and the national demos." (Bernauer and Betzold 2012, 63).

If this is the reasons why governments want civil society to get involved in environmental governance and if civil society agrees to do so, it can be assumed that the result of environmental agreements will be more effective and legitimate.

History of UNFCCC

In the last decades of the 20th century, the international community began to focus on the environment and environmental degradation. At the so-called Earth Summit in Rio de Janeiro in 1992, the UNFCCC were created. The goals of the UNFCCC are:

"(a) to reduce greenhouse gas emissions to a level that would prevent dangerous interference in climate systems so that ecosystems will have time to adapt to climate change; (b) to prevent the agriculture sector from being threatened by climate changes; and (c) that it is possible to have economic development in a sustainable manner so to not harm the environment" (Johnson 2001, 180).

At the time, there was a clear understanding among developed countries that they should have a greater responsibility to reduce carbon emissions. They were also the ones with the capabilities to do so. This resonated with the principle of common but differentiated responsibilities that major developing countries such as Brazil and China also share. Moreover, there was a common notion that high emissions among developing countries had to be tolerated, so that they could achieve a high socio-economic growth. Furthermore, the principle of common but differentiated responsibilities also committed the developed countries to help the developing countries to lower their emissions without halting the development. Thus, the UNFCCC forces the developed countries

to provide technological and financial resources to developing countries, so they can develop clean technologies (The Global Climate Change Regime 2013).

In this framework, there are yearly summits called Conferences of the Parties (COP) in order to form an international climate regime. These meetings involve thousands of participants from various governments, different UN agencies, NGOs and the private sector. In addition, there are two secondary agencies that are doing the majority of the technical work between the summit (The Global Climate Change Regime 2013).

The first major advance in climate change negotiations was reached at COP3 in Kyoto with the drafting of the Kyoto Protocol. However, during the negotiations it became clear that many of the developed countries would not meet the agreed upon targets. Therefore, several mechanisms were founded to give them more flexibility in meeting the emission commitments. Among those mechanisms were the CDM which was a Brazilian initiative. More on CDM later in this section.

It was also at this summit, that the divide between developed and developing countries begun to emerge. At the beginning the consensus, as mentioned earlier in this section, was that there should not be any restrictions on developing countries, so they could have a high socio-economic development. But at the Kyoto summit some of the largest developed countries with United States and Japan at the forefront, started to think that the largest developing countries (such as China, India and Brazil) should take more responsibility (The Global Climate Change Regime 2013).

At the UNFCCC conference in Durban in 2011, the industrialised countries actively participated in negotiations with the major developing countries to find a replacement for the Kyoto protocol. The BASIC group of countries (Brazil, South Africa, India and China) argued that their greenhouse gasses emissions per capita are significantly lower than that of the developed countries and that their contribution to global emissions' reduction should be voluntary so it will not interfere with their central priority which is economic development (Vieira 2013, 376).

After the Durban conference, the Southern states' norm of common but differentiated responsibilities have progressed to a new stage to meet the demands of the Northern countries. In this regard, political and coordinated pressure on the BASIC group from especially the African Group and the Alliance of Small Island States pushed the BASIC countries to accept a more comprehensive and legally binding agreement as a replacement for Kyoto. Furthermore, it was also a sign of the

successful implementation of environmental policies in Brazil and China. This sign provided the two countries with an assurance and international self-confidence that they will be able to decrease their greenhouse gasses (GHG) emissions that are in line with globally accepted targets.

Brazilian government

The core part of Brazil's foreign policy agenda is the differentiation between the obligations of developed and developing countries, there has been a shift to the stance that emerging powers need to take a more active role in climate change negotiations. An example of this, is that Brazil has proposed nationally appropriate targets for carbon emissions reductions. They also proposed the enhancement of technical and financial support for developing countries for climate change mitigation and adaptation (Riethof 2016, 91).

The trend in the Brazilian position on environmental negotiations has been that developed countries should take leadership in carbon emissions reductions and that those targets should be based on actual contributions to climate change. At the climate talks in Durban in 2011, Russia proposed to add a mechanism to the UNFCCC, so that it would be possible to periodically review the status of developing countries. This was rejected by Brazil, among others, and it highlights a major problem in climate change politics: that major developing countries (such as Brazil, China and India) will not commit legally binding commitments (Riethof 2016, 92). However, this is not a refusal to engage in climate change negotiations and participate in binding agreements, rather it is a principled position that future international agreements should reflect climate justice and North-South differences (Riethof 2016, 93).

The interest of many developing countries is the ability to promote economic development alongside the principle of national sovereignty over natural resources. This often results in the argument that developing countries should have the right to exploit their natural resources as developed countries did in the past. An example of this is the question of Brazilian sovereignty over the Amazon region. According to Brazil, their part of the Amazon region is a domestic matter along with the social, environmental and economic difficulties in the region. This view might not be shared by those domestic social movements and NGOs that are engaged in international networking and campaigning. For example, Brazil has resisted international monitoring of deforestation in the

Amazon rainforest and are fighting the internationalisation of the Amazon (Riethof 2016, 94). In the context of the resistance towards the Belo Monte Dam, then president Lula da Silva said in 2012:

“I saw in the newspapers today that a lot of NGOs are coming here from various parts of the world, hiring boats to go to Belém to try to prevent us from constructing a dam ... No one is more preoccupied with the protection of Amazonia and our Indians than we are. Those who have already destroyed theirs do not need to stick their nose in our business” (Riethof 2016, 94).

This citation shows the Brazilian reluctance to allow international monitoring and management of deforestation and other environmental issues. Brazil has seen its eco-system as a matter of national political responsibility. This stems from a combination of commitments to national security, economic development and environmental protection. National security concerns have traditionally referred to difficulties controlling borders and the natural resources. These resources are seen as a vital component for national development. More recently, international NGO's continue to challenge the direction of international climate negotiations and the environmental effects of national policies. Furthermore, business interests are also playing a significant role in influencing environmental policies (Riethof 2016, 94). From the Brazilian perspective, ecological principles cannot contradict the economic principles. Though this undermines the country's ambitions to become a global leader in the field of environmental policy. Furthermore, Brazil stands steadfast on its own principles of the right to self-development (Riethof 2016, 95).

In explaining foreign policy behaviour of emerging countries, there is an increasing attention to the role of ideas, norms and identities. This can be useful when explaining the motivations of Brazil to be more active in international environmental politics. The focus of Brazil's foreign policy tends to focus on multilateralism and to abide by international laws, while still maintaining the rights of self-development. Furthermore, ideas and norms can have an important role in explaining the environmental foreign policy of states. These ideas can be studied at various levels, such as the local level (the society), national level (the state) and the international level (international system). Those ideas shape states' preferences and create their identities as empowered international actors. They are formulated to serve a specific goal and they result from a discussion-based process where all

actors are willing to establish the truth through reasoned arguments. In this process there are also both internal and external influences (Riethof 2016, 95).

Therefore, from the Brazilian point of view, they will not necessarily radically challenge certain norms and principles. Instead, it is an attempt to gain status, so that the Brazilian agenda and interests can be advanced. However, this approach is not special to Brazil, but is common among other emerging powers. Emerging powers have in common that through their foreign policy they seek not only material -and economic development, they also seek status and recognition.

Another important principle is: if a stalemate appears in climate change talks due to irresolvable and rigid differences between developed and developing policies, the environmental foreign agenda should continuously be redefined, because foreign policies are always evolving and adapting to new situations. In this light, it is not surprising that Brazil has changed its position to respond to the fact that, both domestically and internationally, it has been recognised that environmental issues can provide Brazil with a source of potential leverage (Riethof 2016, 96).

If governments pursue an international environmental agenda, it can serve to legitimise governments policy. Environmental foreign policy is often used as a symbolic tool to manage international identities.

Therefore, governments will have an incentive to support international norms in a way to construct an identity as a legitimate international actor. In this sense, norms are also important in shaping environmental foreign policy. An example of this, is that the BASIC countries wants to be perceived as responsible global actors while they are under pressure to take on a larger share of the responsibility for climate change (Riethof 2016, 96).

Despite this, there is disagreement about the international norms in the climate change debate. And there are different views between developed and developing countries. The developed countries focus more on economic efficiency. From their point of view levels of development does not mirror the level of responsibility. While developing countries are arguing that the developed countries have a responsibility to give financial and technical assistance, so the developing countries can better adapt to climate change and to promote sustainable development (Riethof 2016, 8). The belief among developing countries is that it is the developed countries who are responsible for climate change and that forcing environmental policy on developing countries is seen as a form of environmental imperialism. If we look at the moral side, the developing countries have the

advantage because of claims about fairness and that we need to protect the poorest. Thus, emerging powers' commitment can be called a 'new constitutive norm'. This includes that they recognise their responsibilities, but with a differentiation based on national circumstances. Another incentive for developing countries to engage more actively in international climate change policy is to seek legitimacy so that they can gain power and recognition on a global stage. From a Brazilian point of view, this legitimacy is based on claims that its domestic climate change policies are effective. This also shows that Brazil can combat climate change on its own. They can do that without necessarily being subjected to the same internationally binding emissions targets as developed countries. Thus, legitimising the transformation of the climate regime from universal targets for developing countries to a nationally defined regime. Another perspective for Brazil is that this underlines the role they see themselves have as a bridge between developed and developing countries in climate change negotiations. Brazil's national environmental policies show its global and regional leadership ambitions. These ambitions include environmental concerns and the desire to put the country at the forefront of climate change governance and renewable energy (Riethof 2016, 97).

Deforestation

In the early 1980's deforestation hit the international political agenda. It became clear that huge areas of forests had disappeared. This was due to commercial logging, cultivation of lands for agriculture, mining activities, building of infrastructure, lack of forest regulations, large-scale burning, unfair land rights among other reasons. The Amazonian region in Brazil drew special attention because figures showed that an area of the size of the Benelux countries had disappeared each year.

Because of these problems, NGO's like Greenpeace, WWF and the World Rainforest Movement started campaigns world-wide to stop these practices. Furthermore, the International Timber Trade Organisation (ITTO) was established in 1986 by countries that imported and exported timber. ITTO was established to deal with trade problems and environmental issues and launched the ITTO 2000 target. The aim was to base the entire global trade of timber on sustainable forest management practices by the year of 2000 (Arts 2005, 12). However, the organisation was reluctant to cooperate with NGOs to launch a forest certification program and in the end the objective failed. At last, the

UN decided that a global forest treaty should be established to promote conservation and sustainable management. This initiative also failed, mainly due to major differences between developed and developing countries. The former emphasised the urgent need for conservation of tropical forests and the latter emphasising their rights to exploit their forests for economic reasons (Arts 2005, 12).

While governments were arguing about treaties in the UN, several environmental organisations started to cooperate with the industry itself. For example, WWF started a campaign in the UK under the slogan Forests are your business thus sparking a dialogue. This trend was also visible at the global level with dialogue between NGOs and industry. In 1993, 150 organisations from the business sector, environmental sector and human rights movements founded the Forest Stewardship Council (FSC). The main accomplishment of FSC is a forest certification program that is based on FSC values, criteria and standards. These are recognisable through its trademark.

The overall objective of FSC is to stop large-scale deforestation and unsustainable forest management around the world. The means they are using are to certify those practices that promotes the conservation and sustainable use of forests. If a timber producer is certified, they can use the trademark so that wood processors and consumers can recognise the timber. With this certification FSC are promoting sustainable forest management through the market mechanism. Therefore, it has been labelled as a non-state market-driven governance system (Arts 2005, 12). The system is based on ten principles:

“[F]orest management, property rights, rights of the local community, labor rights, sustainability, ecology and biodiversity, planning, control of adverse social and ecological effects, conservation of forests with high ecological value, and plantation.”
(Arts 2005, 12-13).

There are two routes that FSC standardisation can follow. These are the national route or the global route. National NGOs and businesses can develop national sustainable forestry standards in cooperation with the respective governments and then apply for FSC accreditation at a later stage. Another way is that they can use the FSC principles as a starting point to formulate their own standards which are adapted to national circumstances. Thus, making the FSC certifications flexible. But the FSC does more than certify national initiatives and standards. They are also working as an

accreditation organisation for certifiers and verifiers. An independent system has been set up by the FSC so that the certifiers and verifiers can monitor and enforce the principles in a credible and trustworthy way. A consequence of this is that certification and verification are undertaken by private organisations (Arts 2005, 13).

The FSC standards apply to the environmental and social quality of the timber production chain. But it is not a product standard per se as a FSC labels product, in theory, has the same quality as a non-labelled product. The difference is the production processes of the products. Just like the Fair Trade mark on coffee (Arts 2005, 13). Furthermore, the decision-making process in FSC is centred on the General Assembly. It is divided into three chambers – economic, social and environment. These chambers are then divided into a Northern and Southern section. All chambers and sections have equal voting rights (Arts 2005, 13).

Another important player in deforestation is the REDD+ programme under UNFCCC. It is a mechanism similar to the CDM under the 2007 Bali Action Plan (Hall 2016, 116). It stands for Reduced Emissions from Deforestation and Forest Degradation and it provides funding for initiatives to avoid deforestation in developing countries. It has since been expanded to include carbon stocks (REDD+) and restoring secondary forests and sustainable forest production (REDD++) (Hall 2016, 116).

The REDD+ programme embraces national governments, multilateral bodies and major NGOs. The objective is to develop collaborative arrangements. Funding through this programme can be either:

“i) [A]-market based mechanism; ii) a results-based approach; or iii) non-results-based forest protection” (Hall 2016, 116).

4.3.2 Brazil – any figures of deforestation rates?

Brazil’s experience with the REDD+ programme has been fragmented and decentralised. The programmes have not been coordinated at the federal level. Rather, regional states and local initiatives has played a leading role.

The foundation for REDD+ programmes in the Amazon was made during the 1980’s and 1990’s with the spread of various forest conservation and development projects in the Amazon region. The

premise of these projects was that the forest could be preserved while sustaining the livelihoods of forest users and bringing more general environmental benefits to society in general. These initiatives are now the base of pioneering REDD+ schemes that are supported by NGOs (Hall 2016, 121).

However, federal interest in deforestation has faltered. So, the various state governments in the Amazon has seized the initiative in developing REDD+ programmes. The states of Acre, Amazonas and Mato Grosso has developed their own strategies and legislative frameworks for managing ecosystem payments. Furthermore, state governments have been active on the political scene. They have tried to lobby the federal government in playing a stronger role in supporting REDD+ during international climate change negotiations (Hall 2016, 122).

Although there is considerable domestic and international controversy surrounding the role of deforestation in Brazil's carbon emissions, it nevertheless is a core of Brazil's climate change policy. Over the years, the monitoring of deforestation has improved considerably. This is a result of real-time satellite surveillance by the National Institute for Spatial Studies (Instituto Nacional de Estudos Espaciais in Portuguese). Since 2004 the rates at which trees are cut down have dropped steadily. And between 2006-2012 it has more than halved. Furthermore, carbon emissions dropped when deforestation rates began to drop as well. This is expected to contribute significantly to Brazil's emissions targets by 2020. But the causes for the deforestation is controversial because they underline contradictions between commitments to have economic development and environmental protection at the same time (Riethof 2016, 101).

In recent years, forest protection has been criticised for being in favour of the agricultural sector and other economic interests – such as hydroelectricity. Deforestation have been managed through the Forest Code since 1965. This code protects forested areas, stating that between 50% and 80% should remain uncut in Amazonia (Riethof 2016, 101).

However, there are still clashes between environmental and development policy. For example, when the growth is dominated by exports, it will clash with attempts to protect the environment. And often contribute to worsen the environmental problems. In these dilemmas the CDM and REDD+ mechanisms are important tools because they are contributing to the building of large-scale

infrastructural and energy projects that are the foundation for economic growth. For example, large hydroelectric dam complexes (Riethof 2016, 103).

Clean Development Mechanism and Kyoto negotiations

The CDM stems from a Brazilian initiative for a Clean Development Fund. This proposal also included emissions responsibilities on historical emissions. Countries that failed to meet their emissions commitments should pay a fine. This money would then be used for emissions mitigation in the developing world. The amount of money a developing country could receive would be based on its relative contribution to the global temperature increase (Raftopoulos and Riethof 2016, 162). The rationale was that the developing countries that contributes the most to global warming should also receive the greatest financial help because it was argued that they were the ones with the biggest need to reduce emissions. Another component of the CDM was temperature trading credits among developed countries. For example, if a country failed to meet its commitments it would have the option to buy credits from a country that reduced its emissions in order to meet its own commitments. This meant that theoretically it would be costlier for noncompliance than compliance (The Global Climate Change Regime 2013). The objective of this trading scheme was to ensure some benefits to developing countries. The emissions credit trading was tied to efforts at GHG mitigations in the developing world. The G77 group of developing countries feared that a purely market-based scheme would discriminate against technologically backwards countries (Cole 2012, 43).

This proposal was extensively debated at the Kyoto summit, and it was accepted in a compromised form of CDM. Especially the United States were against the initial proposal and tried to convert it into a market-based trading scheme. One of their key interests were to involve developing countries in emissions-mitigation immediately rather than in the future. Therefore, the notion of providing a penalty for noncompliance were changed into an opportunity for investment.

In this form, the CDM was included in Article 12 of the Kyoto Protocol. It identified three objectives:

“(a) achieving sustainable development; (b) attaining the emissions-reduction goals and global temperature stabilization established by the FCCC; and (c) assisting developed countries in complying with their emissions reductions.” (Johnson 2001, 194).

It is only the basic mechanism underlying CDM that are outlined in Article 12. Developing countries can start projects that will result in certifiable emissions reductions and developed countries can then purchase these to meet their emissions targets. Brazil has a number of interests at stake regarding the CDM. First and foremost, they want fair representation for the developing countries in the executive board of CDM. They think that the board should be made of a relatively small group of individuals with a proportionate geographical representation among developed and developing countries. However, using this measure, developing countries would have a majority on the board, because they outnumber developed countries.

A second interest is that Brazil wants to ensure a big opportunity for financial and technological transfer between developed -and developing countries (The Global Climate Change Regime 2013). Brazil's third and last interest regarding the CDM is to prevent the creation of a supranational authority structure. This would limit the sovereignty of the participating countries and hinder the decision-making process relating to CDM projects. Instead, Brazil proposed that a national authority was created in each country. This authority would then determine and subject eligible projects. Furthermore, it would establish the priorities of developing certain eligible projects such as strengthening renewable energy. The role of the executive board would then be to establish an acceptable minimum to measure the emissions reductions from a specific project. And then later in the process to determine whether those targets have been met. Thus, sovereign decision making would then be intact regarding emissions reductions from developing countries (The Global Climate Change Regime 2013).

According the theory of GEG, GEG from the Brazilian perspective is not multilevel. In order for it to be multilevel, global standards should have been implemented at the local level and based on this section they have not been. Even though global environmental politics have been institutionalised through UNFCCC and the CDM, global standards agreed upon in climate change negotiations have not been implemented, because different Brazilian governments are rejecting global environmental norms. They do this because they think that the global norms are interfering with their right to develop. And that developed countries should have more responsibility than developing countries. However, global politics are multipolar. According to this concept environmental politics are not the same across the international community. This can be that global norms and standards that are

agreed upon are not accepted by all parties. In global environmental negotiations there have been a divide between the BASIC countries and the industrialised countries. They think that they have the right to develop just as the global North did in industrialisation era. So, they are rejecting the global norms, such as committing to legally binding agreements. Instead, Brazil have made its own national environmental regulations which they want to project globally in order to become a regional leader.

Paris agreement

In 2015, 195 nations signed the Paris Climate Accord. It is the world's most comprehensive agreement and the objective is to reduce global warming. This represents ambitious targets that have the objective of reaching the purpose of the Paris Agreement. The agreement is taking effect in 2020, and the diplomats are formulating new rules, mechanisms, modalities and procedures to meet their commitments. One of those mechanisms are a reformulation of the CDM and it is expected that the CDM's role would be expanded. Currently, the CDM is a centralised mechanism that gives industrialised countries some flexibility in reducing emissions by implementing and funding clean energy projects in developing countries. However, the improved CDM must address and resolve many of the problems of the former one. The most pressing issue is to reevaluate which sectors qualify as a renewable energy source. In this revision, hydropower will be examined extensively, because many of the hydropower projects under the CDM does not meet the requirements and sustainability objectives of the Kyoto Protocol. For example, many of the projects would have been implemented anyway regardless of carbon credits. Many dam opponents have argued that large-scale hydropower projects should be excluded from CDM (Koo 2017, 868).

As noted previously in this analysis, the CDM allows industrialised countries to meet part of their emissions reduction commitments by buying Certified Emission Reduction (CER) units by investing in renewable energy projects in developing countries. Besides emissions trading the CDM is the only mechanism that provides incentives for emission reduction projects in developing countries. Furthermore, it is also a key means to promote technology transfer. However, the CDM has endured falling participation, partly because of the collapse of CER prices after 2012. Low economic growth and few restrictions on the types of credits lead to an oversupply of CDM credits. Furthermore, the CDM has been criticised for leaning too much on sustainable development goals, unequal

distribution of regional and sub-regional projects and not having a greater financial impact of the more commercially unviable projects (Koo 2017, 869).

It is in this context that the CDM will be revitalised. The new mechanism promises to extend and expand the old one's scope. The objective is to create tradable units at the multilateral level to ensure environmental sustainability and to encourage engagement from various actors. Furthermore, the new agreement makes it possible for individual countries to develop domestic carbon markets. This enables an international market where the demand for carbon credits are not restricted to industrialised countries. However, environmental sustainability is another key factor in the new mechanism so that parties will need to measure outcomes of the project in order to be eligible for crediting (Koo 2017, 869)

Hydroelectric dams in Brazil

Policy towards dams under Lula and Dilma

The countries in the world have two problems: Reducing the rate of climate change while at the same time increasing energy supplies using renewable natural resources. In this scheme, renewable energy has become more and more popular. Brazil has shown renewed interest in energy-generation since the energy crisis in 2001. They seek to diversify energy sources, and in this strategy, hydroelectric power generation plays a central role (Raftopoulos and Riethof 2016, 164).

"This energy deficiency provided the Brazilian government with "a window of opportunity to pursue energy development projects despite their environmental and social costs." (Raftopoulos and Riethof 2016, 164).

Furthermore, there has been increased pressure on energy resources because of the increase in oil production and mining and the expansion of the agricultural sector. This has resulted in the demand for electricity has been higher than the capacity. This boom and prioritisation of mining and agricultural products has resulted in the growing number of energy infrastructure projects across the country, but especially in the Amazon region. Furthermore, Brazil was the eighth largest energy consumer in 2014 and total energy consumption almost doubled since the beginning of the 2000's. The reason for this is the economic growth that Brazil has experienced in this period. The high proportion of renewable energy use and reducing deforestation, the Brazilian argument has been that it is able to meet its climate change commitments (Raftopoulos and Riethof 2016, 164).

Under the CDM, Brazil has become a major recipient for development funds to develop large hydroelectric dams. They can deliver green energy with low greenhouse gas emissions. The dams are designed to help developing countries achieve sustainable development, while at the same time help developed countries to meet their emissions reductions targets set under the Kyoto Protocol. Brazil has used the CDM as a means to meet its energy-generation commitments while meeting its commitments to reduce global carbon emissions (Raftopoulos and Riethof 2016, 164).

Under the banner of green energy, Brazil has expanded the plans for hydroelectric dams in the Amazon region. They have done so to try and meet the rapidly rising domestic energy demand. According to Brazil's 2011-2020 energy expansion plan, 48 large dams are to be built where 30 of those are in the Amazon region. This would mean that one dam is to be built every four months. The Amazon region is actually not particularly well suited for hydropower, because this form of energy production requires an elevation gradient, so hydroelectric plants in the Amazon require large and shallow reserves. Furthermore, the distances between main producers and consumers are large, because the main consumers are the wealthier states in southeast of Brazil. This has meant that the expansion of renewable energy production further necessitates constructing transmission networks which will affect local communities and the environment (Raftopoulos and Riethof 2016, 165).

One of the results of Brazil's hydropower potential is that development of large hydropower plants has become a key aspect of Brazil's development policy. Brazil needs around 6,000 MW each year for the next decade in order to satisfy demand.

One of the reasons why hydroelectricity keeps being high on the agenda is because of the possible economic -and strategic gains. Furthermore, the patrimonial politics of Brazil allows the dominant coalitions much better access to key decision-makers and resources (financial and personnel) and allows them to pursue agendas over long periods of time (Raftopoulos and Riethof 2016, 165). Moreover, under the scheme of 'green economy' Brazil has found a way to legitimise their pursuing of the energy-generation plans by including its hydropower potential into its development strategy. This pursuit has been supported on the global level by the World Bank (WB). The WB has increased funding for constructing hydroelectric dams. Moreover, WB now considers hydroelectricity to be a fundamental part of its energy matrix. However, even though the 'green economy' model was developed to solve the problems between environmental protection and economic development it

is still based on extracting raw materials. The model has also provided yet another way of turning nature into a source of profit by creating a new market for green technologies, goods and services (Raftopoulos and Riethof 2016, 165).

Brazil gets 74% of its combined energy output from hydropower. Lula da Silva (president from 2003-2011) used these figures to promote Brazil as green state in international climate change governance. However, the groundwork for this figure was actually laid by the military dictatorship, as a part of their strategy of energy sovereignty. Nevertheless, extensive plans for the expansion of hydropower was laid out during the presidency of Lula (Castro 2014, 241).

The main pillars of these plans are the abundant river basin systems in the Amazon and Brazil's strong engineering capabilities. These plans focus on the Amazon region, because there are already many hydroelectric plants in the southern parts of the country. These were built as a part of the military government's energy sovereignty plan in the 1970's. Therefore, the Amazon basin has been made into a new frontier for energy expansion. The major driver behind these plans was the energy crisis between 2001 and 2002. Although the then government made successful campaigns to lower the energy consumption among the population and avoiding regular outages, a big part of Lula's first election campaign was to accuse PSDB for bad planning and he promised to expand the energy generation under his presidency (Castro 2014, 242).

The Cardoso government made energy expansion plans to address the energy crisis, and Lula continued these plans. However, a new plan was released in 2007 and adjusted in 2010 and it assumed a 4.5% increase per year in energy production. With this increase the total output would be 40,000 MW in 2020 which would mostly come from newly build hydroelectric plants in the Amazon region. This expansion of hydroelectricity has become one of the major sources of socio-environmental threats in the Amazon and dam construction has become the symbol of the clash between development and conservation policies. One of the arguments for hydroelectricity is that electricity generation is necessary to supply increasing household and industrial energy demands. However, the reliance on large-scale hydroelectric power plants has started intense debates over the actual sustainability of this energy source, unequal distribution of the benefits and socio-environmental costs (Castro 2014, 242).

The main rivers targeted by this expansion are the Xingu, Tapajos, Madeira, Araguaia and Tocantins. One of the major debates and criticisms regarding the plans for these rivers, are that the plans often overlap with territories of indigenous people. Furthermore, conflicts in the government over the licensing process caused some big institutional changes in Brasília with the resignation of environment minister Marina Silva. She accused the government of lacking political support for the Ministry of Environment and for overruling democratic procedures in the environmental licensing. After her resignation, various government agencies and the Public Ministry has been arm wrestling over legal embargos and permissions. This issue is particularly important because it regards the tension between the democratic process and energy security. On the one hand, the government are promoting large-scale hydroelectric plans to increase the energy generation from renewable resources. While on the other hand, overruling the national constitution, overlooking claims from social movements and promoting unequal distribution of the costs and benefits of these projects. Such as in the case of Belo Monte and Madeira River complex (Castro 2014, 242).

When Dilma Rousseff took over as president of Brazil, she inherited both advances and conflicts from policies carried out by the Lula administration. Although these policies were mostly shaped by herself when she was secretary of the state, thus promoting development policies which are the reason for the conflicts with social movements during the Lula administration. However, conservation policies have slipped further down the agenda under her administration than they were under Lula (Castro 2014, 250).

Construction of dams

Belo Monte was first planned in the 1970's but was quickly abandoned due to heavy criticism. However, plans were being revived in 1980's and a massive meeting was set up in the town of Altamira to oppose the new plans that Eletrobrás (federal energy authority) had presented. These included the construction of 300 dams by 2010. The meeting was named the First Encounter of the Indigenous Nations of the Xingu and it attracted environmentalists from all over the world. One of the reasons why this meeting got so much international attention was the potentially negative impacts of the projects and the strength of local opposition (Hall and Branford 2012, 853).

A new study of the design options presented three options for a smaller complex that is based on a run-of-the-river model and not huge reservoirs like in the original plans. In the new design, two canals would divert the water away from indigenous areas and into two reservoirs to prevent flooding. To generate electricity, three dams would be used: Belo Monte, Pimentel and Bela Vista, with power stations at Belo Monte and Pimentel. Furthermore, the total area that would be flooded was decreased from 1225 to 440 square kilometres. Furthermore, the Belo Monte complex is supposed to fill an energy gap of 5-8% a year. This includes both industrial and domestic electricity use. However, the main aim is to satisfy heavy -and subsidised industry such as the aluminium, iron and steel industries which are energy sensitive. However, another argument for the complex is to avoid energy blackouts. In 2010 there was 91 blackouts which is almost double of the number in 2009 (Hall and Branford 2012, 853).

In February 2010, the project was approved by the national environmental control agency IBAMA. They approved the project's impact assessment and gave a provisional licence. When the plans were approved there was an auction over which firm were to build the complex. The Norte Energia consortium won this auction. There was a lot of criticism towards the approval, so the Federal Attorney General cancelled the auction and the licence with the argument that the process was illegal because it violated article 176 of the constitution by not taking account of the impacts on indigenous lands and people. However, this decision was appealed and annulled and the results of the auction were reinstated. Thus, in August 2010 president Lula signed the contract with Norte Energia. However, construction could not begin until IBAMA granted the installation licence. To get this licence, the contractors had to prove that 40 environmental mitigation preconditions had been met. A partial installation licence was granted in January 2011 although those requirements had not been met. A month later, the Federal Public Prosecutor filed a lawsuit against Belo Monte. Based on this lawsuit a judge blocked the project citing that all preconditions had not been met. However, in March 2011 a regional federal judge annulled this decision and thus allowed the preparatory work to begin (Hall and Branford 2012, 853).

Continuing this ping pong battle, the Inter-American Commission on Human Rights (IACHR) requested that the licensing process should be annulled because the contractors had not tried the free, prior and informed consent of the affected people. The argument was then that this violated

the human rights. The response from the Brazilian government came firmly stating that: The hydroelectric scheme of Belo Monte should be seen as an important factor in regional and national socio-economic development, with positive impacts on national power-generating capacity and, consequently, on Brazilians' quality of life (Hall and Branford 2012, 853). The IACHR are a part of the Organisation of American States (OAS), and President Rousseff withdrew the Brazilian ambassador as consequence of the request. Eventually the IACHR withdrew the request and an environmental licence were granted so the construction could begin. However, in September 2011 the project was again halted by a federal judge. The argument was that local fish stock in the Xingu River could be damaged (Hall and Branford 2012, 854).

When construction of the Belo Monte hydroelectric dam is finished, it will be the world's third largest based installed capacity after the Itaipú (which is shared between Paraguay, Argentina and Brazil) and the Three Gorges Dam in China. The Belo Monte dam has been the focus of conflict for more than three decades and it has become a symbol of the struggle between energy demands of Brazil's growing economy and the conservation of its forests and natural resources (Hall and Branford 2012, 852).

The confrontation has been going on through successive administrations since initial plans were conceived in the 1970's. When Dilma Rousseff took office in 2011, she inherited this conflict. When she was Minister of Mines and Energy under Lula da Silva, she was strong in her support for large infrastructure projects to promote development with little regard to environmental -and social impacts in the Amazon Rainforest.

In the conflict surrounding Belo Monte, there has been drawn two lines. On the one side there is the powerful pro-dam lobby which comprises construction companies. They are driven by commercial interests and ideological commitments as they see large-scale hydroelectric dams as symbols of modernisation and development. They are supported by the Ministry of Mines and Energy, Eletrobrás and Eletronorte (regional energy authority in northern Brazil). Furthermore, various consulting firms, academic interests and the international aluminium industry are also supporting this approach (Hall and Branford 2012, 852).

On the other side is the local, national and global organisations who are defending the Amazon Rainforest itself and the people living there and their rights. These include various indigenous

groups, the Movement of Dam-Affected People, conservation -and environmental organisations and international anti-dam lobbies (Hall and Branford 2012, 852).

Environmental activism in an historical context

The history of anti-dam groups dates back to the 1970's and it grew into larger movements and organisations in the 1980's. The trigger was the transitioning to democracy between 1979 and 1983. Furthermore, activism moved towards sustainability and environmental concerns in the early 1990's. This was followed by privatisation of the electric sector in the mid-1990's and by the election of Lula da Silva in 2003. Over the years, activism movements have grown to include landless people, the worker's party movement, church activists, indigenous people's movement and environmental activists (McCormick 2010, 38).

Power relations

In the following the resistance toward the Belo Monte and the Madeira River complex will be analysed using Stewart Clegg's circuits of power and Michael Mann's organisational outflanking

Circuits of power

First level

As explained in the theory section of this thesis, this level concerns the international norms of political negotiations. Therefore, the norms and political context in Brazil will be explored in this part. Furthermore, it will be connected to the resistance to Belo Monte and Madeira River hydroelectric projects.

Belo Monte

Natural resources in Brazil has become increasingly politicised over the years. Therefore, the conflicts about hydroelectric dams must be understood in the context of the political situation. Although Latin American countries have always been dependent on natural resources, the economic, political and symbolic significance of the sector has deepened at the global, national and local levels (Riethof 2017, 483). The global expansion of capitalism has intensified the

commodification of the nature and of environmental degradation. Through the expansion of infrastructure and resource extraction in the Amazon region (among others), there has been created a new development frontier. This frontier has become associated with the relocation of the communities that are living near big development projects, such as hydroelectric projects (Riethof 2017, 484). The politicisation of the process of natural resources therefore involves both the government's discourse about the importance of natural resources. Both in terms of national -and social development. On the other side is the intensifying contestation about the social, political and environmental sustainability of extractivist projects (Riethof 2017, 484).

Brazil's impressive growth rates between 2004 and 2011 has been based on not only industrial exports, but also exploitation of natural resources. Hydropower has made the expansion of production and exploitation of natural resources possible. Furthermore, it has been the main driver behind the increasing domestic energy use. This development model has involved both more traditional activities such as mining and concerns of the production of renewable resources. Furthermore, the state has been more involved buying previously privatised companies back. The intention of this is:

“to oversee the construction of a new social consensus and social welfare. [Furthermore], the practice of extractivism has become associated with an imagined interest in which the exploitation of nature serves to secure national development and sovereignty, to reduce poverty, increase social participation, to diversify local economies and to guarantee political stability” (Riethof 2017, 484-485).

This has given the various governments the argument that the improvement of socio-economic conditions is based on the expansion of natural resources exploitation. However, the renewed political focus on natural resources has signified that democratic participation in the decision-making process, human rights and environmental protection is not high up on the agenda. This has also meant that natural resources extraction is a centralised field of governance with strict limits to local demands from civil society. Furthermore, the reliance on natural resources does not resolve inequalities. However, it compensates for the negative effects of the commodification of nature. Simultaneously politically marginalised groups, such as indigenous groups, are being affected directly. Furthermore, the strategic importance of natural resources has caused the Latin American governments to deal with environmental issues only at the surface level. This is leading to an

environmental agenda that effectively incorporates actions that are functional to economic growth and a relationship to the global economy that relies on the export of primary commodities (Riethof 2017, 485). However, development strategies that are based on the commodification of nature have come under heavy criticism. A wide variety of socio-environmental actors have argued that natural resources (such as land, water and forests) should not be commodified or considered strategic resources. Rather, they should be considered as part of natural, social and cultural heritage of humankind (Riethof 2017, 485).

The politicisation of natural resources in Latin America in general has created two contradicting arguments. On the one side there is the region's progressive governments. They argue that the exploitation of natural resources will benefit millions of ordinary citizens. Thus, the exploitation is the foundation of expansionist economic and development policies. The general idea is that the trade in natural resources will open up new opportunities to promote economic and social development. On the other side there are the groups, organisations, NGO's etc that are opposed to unregulated exploitation of natural resources leads to uneven distribution of the benefits. Furthermore, they highlight that affected people are denied space to express their different views of this development strategy. They also argue that unregulated exploitation of natural resources creates irreversible damage to the environment. This discourse is relevant both nationally and globally because it resonates with transnational environmental activists (Riethof 2017, 486).

Second level

As stated in the theory, in this level actors are interpreting the rules of the game according to their own interests.

Belo Monte

Environmental activists opposed to the construction of the Belo Monte dam complex, have been successful in using the human rights argument. By doing so, they have access to internationally recognised procedural and substantive rights. This is both general human rights declarations, but also particular declarations regarding indigenous people's rights particularly UN Declaration on the Rights of Indigenous Peoples (UNDRIP). It outlines their right to self-determination and cultural integrity. Another important element of the declaration is that:

“[I]ndigenous peoples bear both substantive and procedural land and resource rights”
(Riethof 2017, 487).

This includes both the legal recognition of indigenous peoples' territories and their rights to use them and its resources. Furthermore, it includes the right to participation and consultation when development projects affect indigenous livelihoods. The human rights perspective emphasise that people experience environmental problems in different ways. For vulnerable groups, this has resulted in uneven access to consultation and legal protection. If the local communities rely on water and land resources, the effects of environmental problems caused by natural resource exploitation will be more severe. Furthermore, these communities often lack the resources and capabilities to adapt to climate change and to put pressure on their government. This happens especially in Brazil (Riethof 2017, 487).

In Brazil, there is a chance for the population to participate and be consulted in licensing of dam projects as the regulatory structure allows that. The consultation process has turned into a debate about the recognition of the rights of those groups that will be affected by the dams. Furthermore, the process is subject to contention, because it is open to public participation. The process also includes environmental and social considerations, but it is not certain whether the consultation process can address all environmental and social concerns (Riethof 2017, 487).

In the case of Belo Monte, there was a hearing about human rights violations in 2011. However,

“[w]hoever went to the government hearings did not get a response to their questions. In addition, they organised hearings in the last minute so that we could not participate. We are not being heard by the companies and the government. They come, throw a book detailing the phases of the works on our table or push it under our door, and they say that this is a dialogue” (Riethof 2017, 487).

The licensing procedures are promoting active participation by civil society. However, the citation shows that the rights to protest against hydroelectric projects has been limited. Furthermore, it also shows that consultation procedures are not always effective, and they do not necessarily help to protect the rights of indigenous people or compensate for their losses. This has further aggravated socio-environmental conflicts (Riethof 2017, 487).

They argue that the displacement of indigenous people without sufficient compensation, the demolition of their sacred sights and homes in general and interference with their livelihoods are human rights violations.

The opponents of hydroelectric dam projects have appealed to international recognised human rights, such as the right to information, participation and consultation. They have done so, because they think that the consultation procedures in Brazil are lacking. Therefore, international institutions such as OAS and UNDRIP has become central in their struggle. Not only the special position of indigenous peoples, but also the relationship between environmental problems and human rights, are recognised in the inter-American framework for human rights. It states that:

“where environmental degradation is not managed and minimised, it can threaten living conditions and even life itself, which means that human life is threatened just as human lives can be threatened by torture, imprisonment, and forced labor” (Riethof 2017, 488).

The Inter-American Court of Human Rights has taken precautionary measures against the construction of the Belo Monte complex (Riethof 2017, 488).

The campaign against the Belo Monte hydroelectric dam complex have illustrated how anti-dam activists have been able to use human rights in their fight against the dam and challenge the government’s ethical, legal and political arguments they are using for their development agenda. Activists have been able to draw international attention to Brazil’s human rights record. They have done this by the mobilisation of the symbolic and legal power of human rights. Furthermore, the Belo Monte dam has become an international symbol for the anti-dam movement. By using human rights, activists have been able to focus on the environmental and human costs of natural resource exploitation (Riethof 2017, 489).

Third level

As stated in the theory chapter, the third level is about the resources that the groups have at their disposal. In his theory, Stewart Clegg highlights another theory of Power Relations called

Organisational Outflanking by Michael Mann. Therefore, his theory will be used in this level, because it goes into much more detail than the third level in Circuits of Power.

Organisational Outflanking

While the section about the Circuits of Power focused on the human rights aspect of the conflict surrounding Belo Monte, this section will also be about the resources the different actors have at their disposal and how the government has been able to create conflict among the opposing groups.

Belo Monte

Under both Lula and Dilma, the Brazilian government have stressed repeatedly that Belo Monte will be built according to environmental and indigenous considerations. This project has been hailed by proponents as a sustainable and responsible development project. This project will be followed by a participatory process where affected people will be well informed and have the opportunities to participate in decision-making. In this regard, the Brazilian government have put aside around USD 2 billion to reduce the negative environmental impacts, and to build schools, hospitals etc to further develop the infrastructure in the region. Furthermore, a participatory space was created that comprises representatives from 11 municipalities that will be affected by the dam and various officials from federal, state and municipal level. This space is approving projects that will mitigate the negative impacts that the dam will have on society and environment. Furthermore, this space is responsible for increasing the overall development of the region (Klein 2015, 1145).

In 2010, President Lula made a speech in which he expressed support for Belo Monte. This speech was held in Altamira, which is the closest town to Belo Monte. This was an important moment for the opposition groups, because this speech divided the groups. People had come together to rally and protest in the streets to put pressure on the government for decades. Furthermore, they had supported and voted for Lula when he first took office in 2003 with the hope of change as the Worker's Party has its roots in civil society organisations. However, the speech made it clear that the government was committed to build Belo Monte in the name of democratic -and economic development. The activists had to make a decision, would they keep protesting the dam, or would they engage in efforts to mitigate the negative impacts together with the government. The speech created a significant split between the opposition groups (Klein 2015, 1146). Furthermore, they

were presented with certain political benefits. These actors comprised networks of local, national and international socio-environmental groups. Amongst other things, they had successfully advocated for farmers living near the Xingu River. They had faced illegal land claiming and deforestation between 1995 and 2005. This resulted in conservation areas being created in 2006. However, these groups began to splinter in the light of their dilution of their common cause (Bratman 2015, 70). Some groups began to cooperate with the government to mitigate the negative impacts, while others continued their outright resistance (Klein 2015, 1145).

Furthermore, those activists that were affiliated with the Worker's Party benefitted greatly when Lula won the presidency in 2003, and when they won the governorship in Pará state, which is the state where Belo Monte is located. Those groups gained new political opportunities and project funding. A notable example of this is the Foundation for Life, Production and Preservation (FFPP) as they became an important actor in taking on the roles that the government could not. The most important consequence of this was that the organisation in reality became the government's and other donor's prolonged arm (Bratman 2015, 70). The state influence in various civil society groups grew over time beginning with the election of Lula. Many activists in FFPP had strong ties with the Worker's Party which meant that the organisation changed its view on Belo Monte to not opposed. This decision was based on the assumption that if they backed the project, they could maintain funding for other initiatives as well as political strength in the region (Bratman 2015, 71).

Further tensions arose when the more concessionary groups began to negotiate with the government and the consortium building Belo Monte over social benefit projects. The government promised to build the Transamazon Highway as a part of Belo Monte's construction, and this created a cliff between activists in the region. It went as far as the Catholic Church being opposed to the project (Bratman 2015, 71).

This shows that the government have had the resources to effectively stop a once united front. According to the theory of Organisational Outflanking the government had the organisational resources to do so, and therefore the organisational advantage. The groups did not manage to overcome their differences after Lula's speech in 2010. The reason why it was such a huge blow is because the Worker's Party stems from activist organisations, and therefore there was an

expectation that change regarding Belo Monte would come. But as the first part of the analysis showed, there was more political and developmental arguments.

However, this resistance was only at the local level since the human rights body of OAS is opposing the dam. So, the Brazilian government has not 'won' yet. They managed to destroy a strong united alliance. People were aware that they were being outflanked, because they knew that Lula was going to support Belo Monte in his speech in 2010 (Klein 2015, 1146). They were being outflanked because of division. The objective of this kind of outflanking is to divide various groups in the resistance even though they could form an alliance. And this is exactly what happened with Lula's speech.

There are a significant number of facets the Brazilian foreign policy. Especially when it comes to hydroelectric development in the Amazon. There is the role of the Brazilian government in climate change negotiations. At COP3 in Kyoto they were instrumental in negotiating the CDM and the Lula administration actively used the mechanism to promote hydroelectric development in the Amazon region. However, this development and policy comes at a price and that price is public resistance towards hydroelectric dams. Not only do they impact the people living near the dams, they also impact the environment.

Conclusion

The problem statement was divided into three separate questions. The conclusion will be divided according to the questions, and it will be discussed at the end if Brazil can realise its global leadership ambitions through environmental governance. This discussion will be based on the analysis and the conclusions for the other questions.

How have Brazil's foreign environmental policy since 1997-2017 impacted hydroelectric development in the Amazon?

At the UN conference in Rio de Janeiro in 1992, Brazil – along with other developing countries – took that stance to self-development. That meant that they would decide how to have economic and social development. Among the areas where Brazil wanted the right to self-development were in the area of exploitation of natural resources.

The CDM was a Brazilian initiative at the Kyoto summit in 1997. This mechanism permits countries to trade carbon emissions. For example, if a country meets its emissions obligations, it can sell the remaining carbon credits to a country that does not meet its obligations. Brazil has always been a 'green country'. At the time of the proposal of CDM they got almost 70 percent of their energy output from renewable energy, and therefore met their obligations. Then they could sell their remaining carbon credits to other countries and thus earn a significant amount of money.

In the beginning of the 2000's Brazil experienced severe electricity outages and Lula da Silva won the 2003 presidential election with the promise of fixing the electricity problems. The Amazon region were made into a 'energy frontier'. A special focus of hydroelectric development and the Belo Monte project were revived. This project became a symbol of economic growth encouraged by the government. It also had the purpose at spearheading the efforts at meeting the growing energy demand.

However, hydroelectric projects also had a strategic aspect. Brazil is exporting a significant amount of processed materials such as aluminium and various agricultural products. These sectors require a lot of energy, and hydroelectricity became the main source to provide the energy needed.

And what are the consequences for civil society and the environment?

However, the consequences of hydroelectric projects have been severe for the environment and civil society. The Amazon region is an ecologically sensitive place, and the plan is to build dams on all the main tributaries to the Amazon river. This disrupts various ecosystems and displaces many indigenous people. As the Belo Monte has become a symbol of hydroelectric development, it has also become a symbol of the resistance towards hydroelectric development. In the conflict about Belo Monte, there has been drawn two lines: On the one side there is the pro-dam lobby. This comprises construction companies and they are driven by commercial interests and ideological commitments. They see hydroelectric dams as symbols of modernisation and development. On the other side, there is local, national and global organisations that are defending the Amazon Rainforest, the people living there and their rights. This include indigenous groups such as the Movement of Dam-Affected People and conservation -and environmental organisations.

Hydropower is part of a politicisation of natural resources. The pro-exploitation groups are arguing that it will benefit millions of ordinary citizens and that it permits the promotion of economic and social development. However, the anti-exploitation groups are arguing that unregulated exploitation will lead to uneven distribution of the earned benefits. They further argue that affected people are denied space to express their different views even though it says in the constitution that they must be heard.

The anti-dam groups have been successful in arguing that the Belo Monte complex are violating human rights. They refer to the UNDRIP that states that indigenous people have the right self-determination, cultural integrity and land -and resource rights. These rights have been violated because indigenous people have been displaced, their land flooded, and they have been hindered in participating in the planning and license process of Belo Monte, even though they have the opportunity.

However, former president Lula da Silva expressed support for the project in 2010, which resulted in disorganising the anti-dam groups. They did not agree on if they should cooperate with the government and try to mitigate the negative consequences or keep opposing the project and not cooperate with the government.

References

- Arts, Bas. "Non-state Actors in Global Environmental Governance: New Arrangements Beyond the State." In *New Modes of Governance in the Global System*, by Mathias Koenig-Archibugi and Michael Zürn, 177-200. New Hampshire : Palgrave MacMillan, 2005.
- Bachrach, Peter, and Morton S Baratz. "Two Faces of Power." *The American Political Science Review*, December 1962: 947-952.
- Bäckstrand, Karin. "Multi-stakeholder Partnerships for Sustainable Development: Rethinking Legitimacy, Accountability, and Effectiveness." *European Environment*, 26 9 2006: 290-306.
- Benvenisti, Eyal, and George W Down. "The Empire's New Clothes: Political Economy and the Fragmentation of International Law." *Stanford Law Review*, 29 March 2007: 595-632.
- Bernauer, Thomas, and Carola Betzold. "Civil Society in Global Environmental Governance." *The Journal of Environment & Development*, 2012: 62-66.
- Biermann, Frank, and Pattberg Philipp. "Global Environmental Governance Revisited." In *Global Environmental Governance Revisited*, by Frank Biermann and Pattberg Philipp, 1-25. Massachusetts: MIT Press, 2012.
- Biermann, Frank, and Philipp Pattberg. "Global Environmental Governance Revisited." In *Global Environmental Governance Rconsidered*, by Frank Biermann and Philipp Pattberg, 1-23. Massachusetts: Massachusetts Institute of Technology, 2012.
- Biermann, Frank, and Rainer Brohm. "Implementing the Kyoto Protocol without the United States: The Strategic Role of Energy Tax Adjustment at the Border." *Climate Policy*, 13 January 2005: 289-302.
- Biermann, Frank, Philipp Pattberg, Harro van Asselt, and Fariboz Zelli. "The Fragmentation og Global Governance Architectures: A Framework for Analysis." *Global Environmental Politics*, 14 10 2009: 14-40.
- Bratman, Eve. "Passive Revolution in the Green Economy: Activism and the Belo Monte Dam." *International Environmental Agreements*, 2015: 61-77.
- Bryman, Alan. *Social Research Methods*. Oxford: Oxford University Press, 2012.
- Castro, Fábio de. "Environmental Politics in the Lula Era: Accomplishments and Contradictions." In *Brazil Under the Workers' Party: Continuity and Change from Lula to Dilma*, by Fábio de Castro, Kees Koonings and Marianne Wiesebron, 229-255. London: Palgrave MacMillan, 2014.
- Chan, Sander, and Philipp Pattbeg. "Private Rule-making and the Politics of Accountability: Analyzing Global Forest Governance." *Global Environmental Politics*, 20 8 2008: 103-121.
- Clegg, Stewart R. *Frameworks of Power*. London: Sage Publications, 1989.
- Cole, John. "Genesis of the CDM: the Original Policymaking Goals of the 1997 Brazilian Proposal and their Evolution in the Kyoto Protocol Negotiations into the CDM." *International Environmental Agreements*, 2012: 41-61.

- Dahl, Robert. *Who Governs? Democracy and Power in an American City*. New Haven: Yale University Press, 1961.
- Dingwerth, Klaus. "The Democratic Legitimacy of Public-Private Rule Making: What Can We Learn from the World Commission on Dams?" *Global Governance: A Review of Multilateralism and International Organisations*, 2005: 65-83.
- Duran, Rebeca. *The Brazil Business*. 13 May 2015. <http://thebrazilbusiness.com/article/hydro-electricity-in-brazil> (accessed March 14, 2018).
- Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. New York: Random House, Inc, 1995.
- Garrón, Mauricio. *Worldcrunch*. 18 May 2017. <https://www.worldcrunch.com/tech-science/hydropower-the-clean-motor-of-latin-america39s-energy-future> (accessed May 25, 2018).
- Giddens, Anthony. *Profiles and Critiques in Social Theory*. Los Angeles: University of California Press, 1982.
- . *The Constitution of Society: Outline of the Theory of Structuration*. Los Angeles: University of California Press, 1984.
- Hall, Anthony. "REDD+ in Latin America: Promises and Challenges." In *Provincialising Nature: Multidisciplinary Approaches to the Politics of the Environment in Latin America*, by Michela Coletta and Malayna Raftopoulos, 115-138. London: Institute of Latin American Studies, 2016.
- Hall, Anthony, and Sue Branford. "Development, Dams and Dilma: the Saga of Belo Monte." *Critical Sociology*, 2012: 851-862.
- Haufler, Virginia. "New Forms of Governance: Certification Regimes as Social Regulations of the Global Market." In *Social and Political Dimensions of Forest Certification*, by E Errol Meidinger, Chris Elliott and Gerhard Oesten, 237-247. Remagen: Verlag Kessel, 2003.
- Johnson, Ken. "Brazil and the Politics of Climate Change Negotiations." *The Journal of Environment & Development*, June 2001: 178-206.
- Klein, Peter Taylor. "Engaging the Brazilian State: the Belo Monte Dam and the Struggle for Political Voice." *The Journal of Peasant Studies*, 2015: 1137-1156.
- Koo, Bonsang. "Preparing Hydropower Projects for the Post-Paris Regime: an Econometric Analysis of the Main Drivers for Registration in the Clean Development Mechanism." *Renewable and Sustainable Energy Reviews*, 2017: 868-877.
- Lamont, Christopher. *Research Methods in International Relations*. London: SAGE Publications, 2015.
- Lennox, Victoria. *Conceptualising Global Governance in International Relations*. Dissertation, Ottawa: University of Ottawa, 2008.
- Lukes, Steven. *Power: A Radical View*. London: Palgrave Macmillan, 2005.
- McCormick, Sabrina. "Damming the Amazon: Local Movements and Transnational Struggles Over Water." *Society and Natural Resources*, 2010: 34-48.
- McNeish, John-Andrew, and Axel Borchgrevink. "Introduction: Recovering Power from Energy - Reconsidering the Linkages Between Energy and Development." In *Contested Powers: the Politics of*

Energy and Development in Latin America, by John-Andrew McNeish, Axel Borchgrevink and Owen Logan, 1-40. London: Zed Books, 2015.

Newell, Peter. "The Political Economy of Global Environmental Governance." *Review of International Studies*, 2008: 507-529.

Nölke, Andreas. "Private Norms in the Global Political Economy." In *Global Norms in the Political Economy*, by Klaus-Gerd Giesen and Kees van der Pijl. Cambridge: Cambridge Scholar's Press, 2006.

Olalla, Katherine. *Renewable Energy World*. 12 December 2017.
<https://www.renewableenergyworld.com/ugc/articles/2017/12/01/latin-america-a-new-leader-in-renewable-energy.html> (accessed May 25, 2018).

Pattbeg, Philipp. "The Institutionalisation of Private Governance: How Business and Non-profits Agree on Transnational Rules." *Governance: An International Journal of Policy, Administration, and Institutions*, 2005: 589-610.

Raftopoulos, Malayna, and Marieke Riethof. "Promoting Renewable Energy or Environmental Problems? Environmental Politics and Sustainability in Sino-Brazilian Relations." *Journal of China and International Relations*, 2016: 151-176.

Riethof, Marieke. "Brazil and the International Politics of Climate Change: Leading by Example?" In *Provincialising Nature: Multidisciplinary Approaches to the Politics of the Environment in Latin America*, by Michela Coletta and Malayna Raftopoulos, 89-114. London: Institute of Latin American Studies, 2016.

—. "The International Human Rights Discourse as a Strategic Focus in Socio-environmental Conflicts: the Case of Hydro-electric Dams in Brazil." *The International Journal of Human Rights*, 2017: 482-499.

Sadan, Elisheva. "Theories of Power." In *Empowerment and Community Planning*, by Elisheva Sadan, 33-71. Tel Aviv: Hakibbutz Hameuchad Publishers, 1997.

"The Global Climate Change Regime." 19 June 2013. <https://www.cfr.org/report/global-climate-change-regime> (accessed May 30, 2018).

University of Liverpool. n.d. <https://www.liverpool.ac.uk/modern-languages-and-cultures/staff/marieke-riethof/> (accessed May 30, 2018).

Vaus, David de. *Research Design in Social Research*. London: SAGE Publications, 2001.

Vieira, Marco A. "Brazilian Foreign Policy in the Context of Global Climate Norms." *Foreign Policy Analysis*, October 2013: 369-386.

Vrije Universiteit Amsterdam. n.d. <https://research.vu.nl/en/persons/ph-pattberg> (accessed May 30, 2018).

Worldenergy.org. 2016. <https://www.worldenergy.org/data/resources/region/latin-america-the-caribbean/hydropower/> (accessed May 25, 2018).

Yin, Robert. *Case Study Research: Design and Methods*. London: SAGE Publications, 2009.