

The tangled roots of the sea

The complexities of mangrove conservation in Peninsular Malaysia

Author: Kristina Arnaudova
Supervisor: Tobias Axelsson



Abstract

This thesis studies what triggers people's environmental attitude using theories of the New Environmental Paradigm (NEP) and emotional affinity towards nature. Having looked at the case of a nature park in Kuala Selangor, Peninsular Malaysia carrying out mangrove rehabilitation and conservation, I also aimed to investigate the institutional interrelations and how these combined with environmental attitudes to influence the management of the park. This includes the questionable link between corporate activities and mangrove conservation expressed in CSR activities. Multiple methods were used to reveal the complex reality of carrying out conservation, over the period of a few weeks, including in-depth and semi-structured interviews, participant observation, a questionnaire and informal conversations. It was found that an NEP worldview was a main pillar in the actions of many involved in the national park. Participants, including managers, state officials and volunteers showed an appreciation of the mangrove, which was projected in their actions involving the park. However, local residents, despite their material and historical connection to the mangroves and the expectation of emotional affinity towards nature did not show the same attitude due to socio-economic concerns. The thesis also found that CSR took a main part in the management plan of the park and it was successfully used as a financial tool.

Key words: Mangroves, conservation, New Environmental Paradigm, emotional affinity towards nature, Corporate Social Responsibility

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“If there are no mangroves, then the sea will have no meaning. It is like having a tree without roots, for the mangroves are the roots of the sea...”

Words of a Thai fisher from the Andaman Coast

1. Introduction

1.1 Context of the study

The world is currently facing environmental challenges of great importance. Climate change is threatening the balance of nature, existence of species and whole ecosystems. One of the main causes for environmental degradation is human activities (Harris, 2005). Destructive projects driven by development wipe out vast forested territories with startling speed. The consequences are life threatening and irreversible and they impose a high level of emergency for mitigating actions. This is one of the reasons for the global emergence of forest conservation projects aiming for preserving the existing flora and fauna and rehabilitation of degraded forests.

This study focuses on the conservation of mangroves – coastal forests that thrive in salty and fresh waters, which makes them unique for their kind. They create a special ecosystem that is able to mitigate against problems like water and air pollution, soil erosion, deforestation and biodiversity loss (Harris, 2005). Furthermore, they absorb significant amounts of carbon and store even more in the soil, which is released through deforestation (Sanderman et al., 2018). Mangroves are important not only for the health of the environment but they also sustain people’s livelihoods and form natural barriers, providing protection from disasters (ITTO, 2002; ISME, 1991). However, mangroves are one of the most threatened ecosystems in the world (Barbier et al., 2004). More than 35% of the world mangroves were already lost in the beginning of this century (Valiela et al., 2001). Therefore, it is highly important that more research on their conservation is conducted.

Environmental protection is a leading discourse not only in academia but also amongst all levels of society. Forest conservation and rehabilitation is only one of the branches of environmentalism, which is a primary theme in this thesis. As conservation actions are dependent on multiple institutions, the research will try to resolve the puzzle of interactions

between the different actors in a case study through the perspective of their personal motivations leading to pro-environmental behaviour.

Logically, a way of tackling the loss of mangroves is the creation of conservation and reforestation projects that would secure a sustainable future for this type of forest. However, conservation is tricky and a number of factors must be considered.

Firstly, are biophysical conditions, which might impede a project. For example, reforestation could be complicated by the change of environmental conditions in the area (Vannucci, 2004). Human activities or forces of nature could change the state of the environment in such a way that a forest is no longer able to adapt to the newly created surroundings. This means that large areas, which once were places covered with dense forest, are inevitably changed so they cannot nurture trees anymore unless specialists put a great deal of effort in recovering the land into its previous condition. Sometimes conservationists are encountering the problem of high mortality of the newly planted trees. It is of a great importance that the replanting sites are situated on places, which were previously forested as it is observed that the rate of success of afforestation zones is much lower in areas where mangroves were not supported in the past (Dahdouh-Guebas et al., 2005).

Secondly, are socio-political considerations in starting and running a conservation site, which is what this thesis will focus on, particularly regarding the multiple institutions and their interactions. The institutions involved are important as the threats for mangrove sustainability have a multidisciplinary nature. In many cases, the success of a project is dependent on the management strategy employed. Management plans that involve actors from different sectors like government, NGO, and the private sector are thought of as a successful approach towards environmental protection, and have been met with growing popularity (Friess et al., 2016). However, the occurrence of difficulties along the process might be due to conflicting interests between different stakeholders and/or institutions or internal problems within the values and motivations of conservationists (participants in the rehabilitating projects).

In Malaysia, the subject of sustainability is taking a central position in the management of companies, organizations and daily life. 'Sustainability' is one of the central pillars of the last two 5-year plans in Malaysia (The Economic Planning Unit Prime Minister's Department

Putrajaya, 2010; 2015), which inevitably influences private business. This movement leads to plenty of CSR (corporate social responsibility) projects focusing on mangrove planting. This study will explore holistically one such project seen as a mangrove rehabilitation tool. As the personal motivation of the participants is of a general importance for the smooth accomplishment of the event, the research also investigates the main drivers for participation and pro-environmental behaviour.

All of the above-mentioned factors build the basis of a successful conservation project and therefore need to be further researched. Little has been written on the subject of CSR activities employed for rehabilitation projects, nor for the personal motivations of the actors engaged and we need to further explore this issue. A gap in knowledge regarding mangroves is how people perceive their value, education practices on the subject of mangrove protection and their practical implementation (Dale et al., 2014).

1.2 Aims and Research questions

This thesis concentrates on researching effective actions for mangrove rehabilitation. It aims to explore which are the key factors that make a forest conservation project successful. The problem of multi-institutionalism often suggests a vast network of interactions, politics, interests (economic and social), bias opinions and personal feelings. This research is unable to decode such complexity due to multiple reasons and the volume of work required. However, it aims to find out which are the existing factors in such a network that create positive outcomes, vis-a-vis nature preservation. Undoubtedly, the results would differ in different context but the research will try to locate those factors that can be utilized in the general case.

The thesis frames the above-mentioned problem into a case study on mangrove rehabilitation program operationalized through Corporate Social Responsibility (CSR) activities taking place in Kuala Selangor Nature Park in the state of Selangor, Malaysia. The study departs from a replanting CSR event in the mangrove forest of Kuala Selangor Nature Park (KSNP) and develops into decoding, to a certain level, the comprehensive network of multilevel interactions between participants and institutions involved with the rehabilitation of the park. Hence, the aim of this thesis is two-fold.

Firstly, it aims to understand what triggers people's proactive behaviour for environmental protection in the frame of a mangrove rehabilitation project and how these motivations evolve into the conservation efforts of the park. Secondly, the study will discuss how the role of CSR activities is fulfilling the conservation needs of the park. The two problems are interconnected, as they sustain each other in the case of KSNP and the study aims to understand how they are mutually-dependent. At a discursive level people's pro-environmental ideas are tied up with what they believe is important to do to protect the environment and who should be responsible. As such, the institutional focus on CSR could be influenced by this. Focusing on the case of KSNP and its mangrove restoration methods, the study also aims to contribute to the existing literature of nature park governance and to add to the discussion of successful frameworks of multi-institutional cooperation. The focus lays on factors like CSR projects for fundraising and planting activities as well as triggers of pro-environmental behaviour for all participants.

In order for the thesis to complete its aims, it needs to answer the following overarching questions:

- 1. How do personal motivations influence people to take part in conservation activities?**
- 2. What role do Corporate Social Responsibility events play in the activities of KSNP?**

For further clarification and deeper understanding of the problems there are three main sub questions to be answered as well.

- 1. How do volunteers perceive the mangrove emotionally and socio-politically?*

This question seeks to understand the emotions that the mangrove triggers in people engaged with KSNP mangrove forest restoration and explores the link between these emotions and motivations for participating in conservation activities. It also aims to recognize participants' awareness of who is responsible for the wellbeing of the mangrove and the crucial factors which influence the forest health. In this way, the question seeks to shed light on how people perceive the role of development companies and politics in the nature park.

- 2. To what extent does the pro-environmental behaviour of participants in the rehabilitation projects guarantee the success of CSR events?*

This question seeks to find an answer of the way in which pro-environmental behaviour and CSR events correlate, considering the purely environmentalist nature of the first and business roots of the second. It also aims to reveal whether there is a clash between personal motivations and corporate ones.

3. *In what way is CSR important to KSNP and to the companies?*

What are the pros and cons of using CSR as a main rehabilitation method for KSNP?

These questions seek to find an answer if CSR is a satisfactory practice for the needs of the KSNP in relation to the management plan. It also aims to unveil what is the purpose of CSR for companies and for KSNP and whether it corresponds or not.

1.4 Significance of the study

The study aims to provide a deeper understanding on the complexities of mangrove restoration in Peninsular Malaysia. It aims to shed light onto how participants' personal motivations are formed and how these influence their pro-environmental behaviour. Furthermore, the thesis seeks to shed light onto the way NEP worldview influences the conservation practices in KSNP. The study focuses also on CSR as a method used for financing and provides an insight on how different institutions affect and perceive the project. As sustainability and environmental protection is a growing theme in Malaysia, the study provides the basis for further research to be conducted in order to examine the factors which influence such projects in a positive way.

2. Literature Review

2.1 Global situation

The importance of mangrove trees is recognized globally for the cultural, recreational, and economic benefits they provide. Mangroves create an ecosystem that is extremely rich in biodiversity and sustains many species (Barbier et al., 2004). The nutritious environment that they generate and their specific root system turns them into a nursery for a great deal of animals (Nagelkerken et al., 2008). Therefore, this type of a forest can also serve local communities well, providing them with resources like food and wood, which is further used for charcoal, firewood and poles (Shukor and Hamid bin, 2004). Also, mangrove timber is economically the most valuable timber in some countries (*ibid.*). Furthermore, coastal forests

are a natural barrier for storms and provide protection for nearby settlements (ITTO, 2002; ISME, 1991).

The importance of mangroves is often neglected and the forests are left to destruction, fragmentation or degradation (ITTO, 2002). Human activity is considered a main cause of the above-mentioned problems (*ibid.*). Conversion of mangroves into agri/aquaculture, coastal development and over-exploitation of resources are only some of the reasons for mangrove destruction (ITTO, 2002; Richards and Friess, 2016).

Deforestation leads to multiple negative effects on the environment (Jomo et al., 2004). It affects the condition of the soil and causes erosion and landslides; water quality is also affected negatively (*ibid.*). Moreover, fauna disorder can also be seen, which afterwards affects nearby villages (*ibid.*). It also deprives local villagers dependent on resources from the forests from economic benefits or even daily means for survival (Sarntisart et al., 2004). Therefore, it is rational to think of a solution to the problem. As Sponsel (2012) puts it – it is necessary for us to change our mind-sets and rethink our connection with nature. The process of changing our attitude towards nature protection and avoid alienation with it might be long but sustainable and long-lasting (Sponsel, 2012).

Another important point is that in an age of climate change and severe deforestation we need to sustain forests of any kind, in order to reduce the amounts of greenhouse gases in the atmosphere. The realization that mangroves feed, protect, sustain rich biodiversity and reduce harmful gases should lead society to more actions regarding conserving these types of forests. The data on mangrove loss is highly variable depending on the sources. Some scholars claim the inevitable loss of all mangroves in the next century (Dale et al., 2014; Duke et al., 2007). Since 1980, the percentage of mangrove loss globally is 20%-35% (FAO, 2003). Most up to date sources state that between 2000 and 2012 the total mangrove cover in the world decreased with 1646 km², which accounts for 1.92% from the total mangrove forests coverage and 0.16% per year (Hamilton et al., 2016).

Mangrove deforestation worldwide has been decreasing since 2000 but the countries with the biggest mangrove territories (which are in Southeast Asia) are still unstable (Hamilton et al., 2016). No matter the varying data, the facts are that deforestation is not only happening but it is also threatening the ecosystems that mangroves sustain.

2.2 Location of the Case Study

Malaysia is in top three in the world by mangrove territory. The total mangrove area in the country is only about 2% of the total land area as of the year of 2004 (Shukor and Hamid bin, 2004). These 2% equal to 641,885 ha and 17% of this is situated on Peninsular Malaysia (*ibid.*). There are 74 mangrove forest reserves established on the peninsula and their territory accounts for 83.2% (88 667ha) of the total mangrove cover there (*ibid.*). As for the case of the State of Selangor on Peninsular Malaysia, where the study was conducted, 100% (18 998 ha) of the mangrove forests are gazetted as permanent forest reserves (SIRIM QAS International, 2016). Selangor is one of the 9 states in peninsular Malaysia and the only one in which logging activities on state land are illegal (SIRIM QAS International, 2016). The state put a moratorium on the commercial logging activities for 25 years, starting in 2010 and declared in the 10th Malaysia Plan (*ibid.*).

Kuala Selangor is a small sleepy town in the state of Selangor, with a population of 272,980 people (in 2011) on a territory of 119,452.46 hectares (Kuala Selangor RTD, 2015). It seems on a first glance that the community is still very traditional. Even after a couple of days spent in the town, this perception was only reconfirmed. There are a couple of fishing villages along the Selangor river. Two of them – Pasir Penambang and Kampung Kuantan were visited for participant observation during the research. The dominant community living in Pasir Penambang is Chinese and the village is known for the good quality seafood restaurants. On the fringe of Kampung Kuantan one can find one of the popular tourist attractions in the area that is tightly related to the health of the mangroves – namely, one of the biggest firefly colonies in the world (Cheng et al., 2017). According to some newspapers – the colonies of fireflies are dying out which means that the health of the ecosystem that the mangroves create is being degraded (*ibid.*). This leads to a great deal of problems for the environment and the community.

Kuala Selangor Nature Park, situated just by the town, seems to be pretty much of the same size as Kuala Selangor itself. It is considered as one of the getaways from the nearby mega polis Kuala Lumpur – only 40 minutes drive by car. This is a reason why the park is valued as a destination for ecotourism. Another important feature of the area is that it is a place for nesting of migratory birds and KSNP is recognized as Important Bird Area (MNS, 2016)

The park was divided in two areas – secondary forest and mangrove forest with paths and boardwalks providing the infrastructure (see Fig.1).

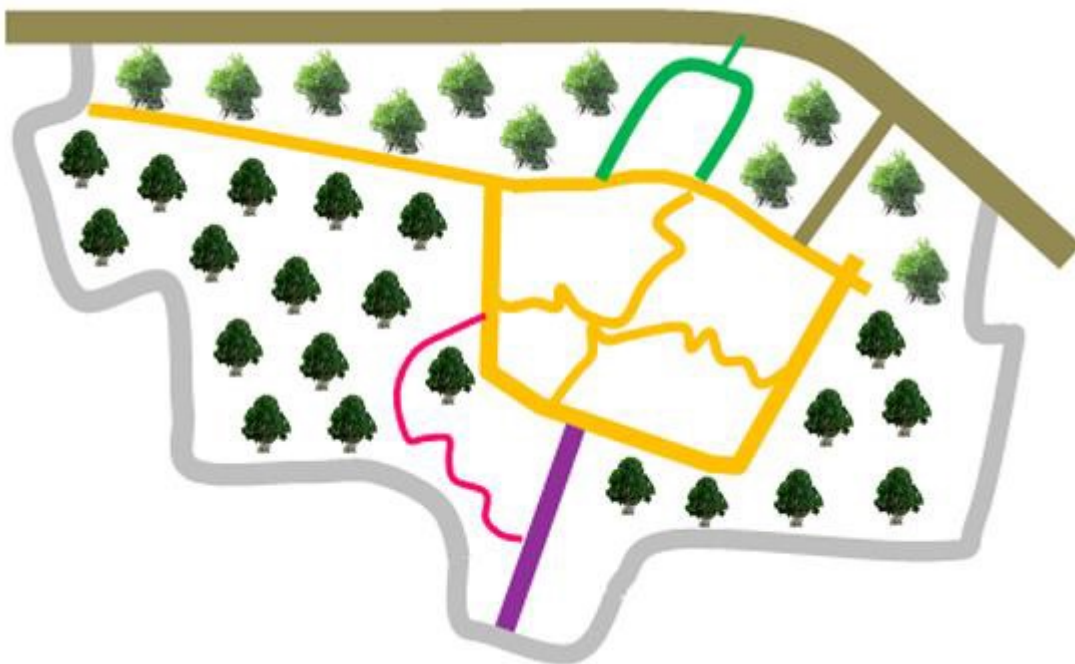


Figure.1 A Map of KSNP
Cited from MNS, 2016; p.22

According to the managers of the park, they need to self-sustain and find finance themselves (Manager 1, 2018). Throughout the years, they have been focusing on different initiatives that would bring money to the park. The activities, that the management finds successful are CSR programs with diverse partners. Many of these companies, doing CSR in KSNP are big development companies and some of them are listed as ‘stakeholders’ in the management plan of the nature park. The activities usually consist of a short education part before the planting activities, followed by the actual planting of mangrove saplings. The overall aim is to rehabilitate the mangrove forest.

2.3 Studies on CSR

Currently, the idea of Sustainability is put on a pedestal in Malaysia. With the creation of the 10th Malaysia Plan the discourse of Sustainability became a leading theme (The Economic Planning Unit Prime Minister’s Department Putrajaya, 2010). The 11th Malaysia Plan was a logical continuation of what was started in the previous 5 years and therefore the concept of ‘sustainability’ was growing in importance and turning into a main goal for the country,

rooting itself into the private and public mindset. As a result, numerous companies aim to create their image on the theme of sustainable future and to engage with environmental activities.

During 2014, ASEAN created a project called ‘ASEAN CSR Vision 2020’. They envisage a future of the ASEAN countries with a growing number of CSR activities. The ASEAN CSR Network set itself the following mission: ‘*To promote and enable responsible business conduct in ASEAN to achieve sustainable, equitable and inclusive social, environmental and economic development*’ (ASEAN CSR Network, 2015).

A study on the idea of CSR amongst the small and medium-size enterprise in Malaysia was conducted to understand the motivations of companies to engage in pro-environmental activities (Nejati and Amran, 2009). CSR projects are gaining popularity not only amongst the big corporations but also with small and medium-sized ones (*ibid.*). The meaning of this movement is that more companies as a unit and also, more employees as individuals are given the freedom to express their values, regarding ecological or social problems (Vogel, 2005). However, not always pro-environmental values incentivize businesses to engage with CSR (Nejati and Amran, 2005). Too frequently, peer pressure or client demands are reasons for a company to take a step towards CSR (Petts et al., 1999; Nejati and Amran, 2009; Revell and Blackburn, 2007). The market demands in general are changing in a way that requires companies to be ecofriendly and in order to stay competitive they need to accept and take an active part into the new ecological discourse of contemporary business (*ibid.*).

Except market pressure, other reasons for companies to engage with CSR are that they feel moral obligation (Longo et al., 2005; Jenkins, 2004) and they want to be ‘good citizens’ and contribute to society (Enderle, 2004).

2.4 Studies on the location

Worldwide, a growing number of academics are underlining the importance of community inclusion in rehabilitation projects, raising awareness for the significance of mangroves and even transferring the governance of forests to the locals (Jansen, 2015; Datta et al., 2012; Walters, 2004). Community participation can be implemented in many different ways and mostly depending on the needs of the location. In many cases, NGOs are the ones that would engage with the organization of rehabilitation events with or without government participation.

Within this vein, only two studies were written on Kuala Selangor. Both shared the theme of local awareness about mangrove conservation, aiming towards community inclusion in projects. As the inclusion of local people is considered by some vital for the success of projects of such kind, Rahman and Asmawi (2016) studied a group of citizens in Kuala Selangor in order to analyze the level of their awareness of mangrove destruction and what it depends on. The conclusion was that the people who would visit mangroves more often were more aware of the worsened forest conditions and yet most of the participants in the study recognized illegal logging as the first reason for forest depletion and urbanization as the second (*ibid.*). Overall, the residents of Kuala Selangor showed a low level of awareness and the proposed solutions of the problem was education on mangroves and more frequent visits of the forests (*ibid.*). More powerful legislation in terms of forest protection was also demanded by the citizens (*ibid.*).

A supplementary study in the villages around Kuala Selangor showed that about 20% of the participants in a questionnaire were not even aware of the existence of a mangrove forest near their village (Sawairnathan and Halimoon, 2017). Their awareness varied depending on the distance from their living space to the mangrove (*ibid.*). However, the people who lived further away from the forest and were older in age, valued mangroves more than the younger participants and those who lived closer (*ibid.*). It should be stressed that the people who lived the longest near the forest and therefore spent more time in its surroundings were the most pro-conservation oriented ones (*ibid.*).

3. Theoretical Framework and concepts

In order for the study to find answers to the research questions through analyses, there is a need for relevant theoretical framework. As the study revolves around the act of forest restoration and rehabilitation, these two terms must be defined and their way of utilization - clarified. Taking this clarification as a departure point, a conceptualization of the forest as a space of *the New Commons* needs to situate itself in this chapter. As the mangrove is viewed as a source of benefits for a large circle of the society, the idea of the New Commons allow for bridging the multiple institutions that take part in CSR rehabilitation projects. The New Commons is a sound base for researching one's non-economic motivations for nature

preservation. The research moves forward and frames the further analyses into behavioural theory. The study borrows the idea of the *New Ecological Paradigm* or NEP and *Emotional Affinity towards Nature* in order to explore the pro-environmental attitudes of the participants and in this way to answer the first research question. Due to the multidisciplinary nature of the second research question, only through looking at the above mentioned concepts interfering with each other, it is possible to find its answer.

3.1 Conceptualizing ‘forest restoration’ and ‘forest rehabilitation’

According to Blumer (1954), clarification of concepts in one’s research paper is strongly needed as it helps clarify and delimit the variability of an idea. Although, there is some disagreement with Blumer that providing a general understanding of the concept is not always favorable in the sense that it might either generalize too widely or narrow down the scope of a concept in a delimiting way (Bryman, 2012, p. 388). No matter these potential problems, the concepts used in this paper will be clarified as this will provide an equal starting point for the readers and provide a defined path for further understanding of the followed up argument. As mangrove forests used to be in a much greater state in regards to territory, health and ability to provide ecosystem services compared to today – a great deal of specialists in the area are using the terms ‘rehabilitation’ and ‘restoration’ when it comes to projects aiming to bring the forests back to thriving condition. Therefore, there is need for an explanation to be provided which terms are going to be used in the paper followed by a concrete definition. To start with, Field (1999) distinguishes between both terms in regards to their users and the actions taken during the process of either ‘rehabilitation’ or ‘restoration’. Field insists on the following definitions :

‘[...] rehabilitation of an ecosystem [will] be defined as the act of partially or, more rarely, fully replacing structural or functional characteristics of an ecosystem that have been diminished or lost, or the substitution of alternative qualities or characteristics than those originally present with proviso that they have more social, economic or ecological value than existed in the disturbed or degraded state. Likewise it has been agreed that restoration of an ecosystem is the act of bringing an ecosystem back into, as nearly as possible, its original condition. Restoration is seen as a special case of rehabilitation.’

(Field, 1999, p.384)

There are numerous examples of authors who use the two terms ‘rehabilitation’ and ‘restoration’ interchangeably. This thesis will employ the same strategy, as the slight difference pointed by Field is not of a significant importance for the study.

3.2 Conceptualizing the forest as a New Commons

As mentioned in the chapters above, the theme for conservation of mangroves is one of a multidisciplinary nature and a research of the subject requires diverse theories weaved into each other. Using such an approach allows the study to understand in depth the nature of the case on focus. Therefore, we need to consider the biological and socio-political/social functions of mangroves and no matter what their status is (protected or not), they keep providing services for the people. Thus said, mangroves worldwide and the ones on KSNP territory shall be framed in this study as ‘new commons’. The concept of ‘the new commons’ derives from one of the pivotal works on commons – ‘The tragedy of the commons’ and the idea that common pool resources will be exploited rather than conserved (Hardin, 1968). Throughout the years not only the academic discussion about management of common pool resources developed but also the reality of the ‘commons’ themselves changed in such a way that it required a new term – ‘the new commons’. This concept helps illuminate the contemporary problems of the field of forest management and reforestation and allows a researcher to seek for answers of newly developed issues.

3.3 The New Commons

One concept that answers the needs of discussions on problems like climate change, deforestation, water safety and land erosion, which are experienced globally, is that of the The New Commons. According to the definition of Duraiappah et al., The New Commons are ‘the mosaic of land, water, and climate, and their underlying processes that ecosystem structure and functions to maintain a sustainable supply of common pool resources for human well-being’ (2014, p.1). The great diversity of socio-economic services that the environment provides us with and directly and indirectly influence human well-being is referred to as ‘bundles of ecosystem services’ by Duraiappah et al. (2014).

Even if nature parks are areas with limited freedom for the visitors and restrictions on the usage of the material resources that they provide, these parks still provide common ecosystem services. As discussed in the Introduction, ecosystem services have a great value for people

and life on the planet in general. This leads to the importance of organizing the management system of the parks in a way that sustains the environment with the inclusion of all beneficiaries of the ecosystem services provided. In some cases, the new commons are managed by one party only but in others there is a group of institutions that is involved with the governance of the park. Depending on the case, the different parties have a different level of involvement and responsibilities. This diversity provides us with precious information on the successful managerial practices and studies on the cases could inform us on how to avoid the flaws and enhance the strengths of a governance strategy.

An inevitable part of people's involvement in a conservation project are their values, motivations, and understanding of the subject. One of the flows recognized in the existing literature is the mismatch of values that parties involved with conservation have or namely – 'cognitive dissonance' (Duraiappah et al., 2014). Cognitive dissonance is particularly evident when individuals have to decide on the use of common pool resources or provisioning ecosystem services and other goods and assets versus preserving ecosystem services exhibiting non-rival characteristics such as regulating and cultural ecosystem services — the New Commons (Duraiappah et al., 2014).

3.4 Pro-environmental behaviour

Duraiappah et al. suggest that further research is needed in order to resolve the problem with mismatches (2014). A relevant study would be one exploring the values and beliefs (excluding economic ones) of people from diverse levels of society, which explains their behaviour towards the environment and ecosystem services. This study aims to fill this gap by collecting primary data from people directly and indirectly involved with the mangrove rehabilitation practices of KSNP and specifically a CSR planting activity, supported by a development company. The data will be analysed through a constructivist perspective represented by the New Ecological Paradigm (NEP) (Dunlap and Liere, 2008). NEP is a worldview, made up of ecological values and opposing fast economic growth and pursuit of development that threatens the balance in nature. NEP advocates for a mind-set that challenges the dominant social paradigm (DSP) of fast progress on the cost of environmental degradation (Pirages, 1973). Dunlap and Liere created a questionnaire that acts as an instrument to measure NEP (2008) but as the new environmental paradigm is already an established concept, which is well known in academia, this study will examine the construction of NEP worldview through researching the emotional affinity towards nature

amongst the informants. By integrating emotions in NEP measurement, the research aims to bring the theory a step further towards pro-environmental behaviour.

Emotional affinity towards nature branches out in two main directions - social responsibility triggered by indignation towards the destruction of nature and love of nature (Kals et al., 1999). Emotional affinity finds its root in the concept of *Biophilia*, simply explained as the love of life (Eckhardt, 1992). Kellert advances Eckhardt's theory of biophilia, claiming that people are attracted to nature and they create a relationship, which influences people's well-being (1997).

Emotional affinity towards nature builds up in one's life through outdoor experiences, which include the use of all five senses (Kals et al., 1999). The emergence of attachment is triggered by 'love of nature, feelings of freedom, feelings of safety, and feelings of oneness with nature' (Kals et al., 1999, p. 10). Affinity amplifies when spending time outdoors is shared by significant others, causing the exchange of positive emotions, safety and curiosity (Vining, 1992; Kals et al., 1999).

3.5 NEP through institutional perspective and CSR frame

One of the triggers for pro-environmental behaviour is the feeling of social responsibility (Kals et al., 1999). In order for the theory to become able for utilization in this study, there is a need of its replication on a larger scale and in a different environment. Therefore, NEP and emotional affinity towards nature will be framed in a corporate social responsibility event used as a replanting tool in the management of a national park.

CSR activities' efficiency inevitably depends on the human factor and personal motivations. It would be impossible to trace and understand in depth the multi institutional network and specifically the private sector role into conservation without considering the personal factor with the help of implemented behavioural theory. As the choice of environmental conservation is a question of values it is essential to discuss CSR activities through the perspective of environmentalism and NEP. No matter that CSR is born in the corporate world, in its pure form it belongs to a field with no financial interest but mainly ideal goals. CSR could be considered as a bridge between capitalism and responsible behaviour towards nature. A way of studying this bridge is researching the very base of 'corporate' people's understandings and feelings towards nature.

It should be pointed out that there is an existent academic discussion whether holding CSR events is a successful and sustainable managerial strategy for forest rehabilitation. Authors like Rowland argue that corporations organize CSR events with the intention of gaining economic benefits in the future, rather than basing their decisions on ecological values (2009). Rowland develops his theory into a contemporary version of Hardin's *Tragedy of the Commons* and the idea of exploiting the commons for personal benefits. Others argue that the existence of multiple actors in the same governance structure would lead to complications and will enhance the possibilities of conflicts (Botero and Salzwedel, 1999; Katon et al., 2000).

On the other hand, there is a great deal of academics who advocate for larger inclusion of the private sector in forest rehabilitation through SCR and other activities (Freiss et al., 2016). Their reasoning is that a multi institutional approach to nature park management is more successful than a single institution one. Thus, private businesses adds to the needed diversity of institutions. Furthermore, a greater number of institutions, which bridge the gaps between existing ones, secures connectivity between the diversity of values and ideas of different participants (Duraiappah et al., 2014).

3.6 Theory map

This group of theories will serve as a guideline for the analysis of the gathered data. New Environmental Paradigm is of a general importance as it is the overarching theory, representing a worldview shared by all levels of participants in KSNP structures. NEP lays in the very basis of the research as it is woven from ideal values, which bridge different institutions. It will help to analyse how multi institutional correspondation happens in a complex network of participants in conservation activities and it will reveal how institutions with different aims can adjust their politics for one higher goal.

In order to unveil the complexity of interactions, the thesis will use NEP theory in the frame of CSR with the intentions of examining what meaning CSR have for the different participants - MNS, the volunteers, the company and the state. The analysed data will either come in as support for Rowland, arguing for CSR as PR tool for future economic benefit (2009) or it will support the original idea behind corporate social responsibility - ideal moral values, projected on society or nature (Longo et al., 2005; Enderle, 2004).

On the very base of the analysis lays the theory of ‘emotional affinity towards nature’, which aims to study the roots of the behaviour of the informants. As the thesis aims to find out what motivates people to take part in conservation activities, emotional affinity is the tool, which would allow us to understand how pro-environmental attitude is formed and later projected in CSR. Emotional affinity towards nature will be used as a symbolical bridge between all participants.

4. Methodology

This chapter aims to provide clarification and justification of the used methods in the research. It also, explains why the specific study design was chosen in relation to all the factors surrounding the research, namely - types of sources, informants, time delimitation and language of communication. A discussion on ethical consideration, limitations of the methodology and reliability and validity is also included in the chapter.

4.1 Study design

The nature of this study required qualitative research as it aims to understand the perceptions of different stakeholders towards mangrove rehabilitation and conservation along with their view of the other participants’ involvement and personal motivations. This type of research was best for the purpose of the study as it allowed me to focus on ‘words rather than numbers’ (Bryman, 2012 p. 380). There was no better way to understand in depth the feelings, motivations and the logic behind the actions of all these people that were concerned with the future of the nature park of Kuala Selangor and the mangrove that it nurtured than talking to them. Borrowing people’s words for the purpose of the research, analyzing the text and generating results was best functionalized by qualitative research and the methods that it offered. Some of the prominent features of qualitative research suggested by Bryman like inductive view and constructionist ontological position were utilized in the study (Bryman, 2012).

Keeping in mind that I was doing inductive study, the study design needed to be flexible. Another factor that contributed to the avoidance of strict format of the design was the diversity of primary information sources. It was possible that I would need to collect data from all kinds of institutions and people as it happened. I had to consider the time limitations

that I had for the research, the number of participants, as well as the need of collecting documents for further analyses.

As Bryman says – ‘In qualitative research, theory is supposed to be an outcome of an investigation rather than something that precedes it.’ (Bryman, 2012, p. 384) which is strictly in tune with the needs of the research that I attempted.

Prior to my arrival in the field, I had a general idea what I want to achieve during the data collection. I had background knowledge about the main issues in the field of nature conservation and mangrove loss which gave me clues what to expect from the field. However, I needed to avoid making predictions and/or being bias and I had to give freedom to the research in order to evolve in a direction that was natural for the surroundings, instead of being guided towards an irrelevant direction by an external person – me (Bryman, 2012).

I wanted to keep myself open-minded and meet the real need for a specific research that would be relevant and important to the site and the field. I preferred to stay flexible and guided to a certain extent by the participants in my research, rather than following a strict schedule that will not allow me to develop the research in a more relevant direction.

The study design that was chosen for the research, suggested that I should firstly become familiar with the situation in the nature park of Kuala Selangor before making generalizations based only on literature review. Guided by this belief, I quickly realized that the research should change its prior focus on community-based management towards inclusion of the urban society in mangrove restoration projects through CSR activities. This realization lead to the change of prior plans on data collection methods and informants.

In order for the research to be relevant to the reality, created and presented as such by the informants of the study and to further serve best the needs of the field of mangrove conservation, it was obvious that inductive view was strongly needed.

Another important point relevant to the above said is that qualitative research gave me the tools, which allowed me to understand the construction of the idea for protection of mangroves as presented by the different stakeholders. A pivotal point in the study is understanding in depth how people engaging with mangrove conservation on different levels see ‘nature’, ‘mangroves’ and the potential dangers and hopes surrounding the threatened existence of this type of forest.

4.2 Data collection

Due to the diverse primary sources, a multi-method approach was employed for the needs of the research. The study included four-levelled participation:

1. Local, living in the nearby settlements of Kuala Selangor and Pasir Penambang
2. Park managers (M1 and M2) as representatives of the NGO MNS that holds the managing responsibilities of the park and organizes all the activities
3. Volunteers from the company that is conducting its CSR program in the park as representatives of a temporary urban visitor that reconnect with nature.
4. State Forestry director as a representative of the State as a landowner

All of the participants were positioned on different levels in society, having different occupations and functions. They related themselves to nature and to the act of conservation and mangrove rehabilitation in a different way which supposed careful planning of the data collection method. Another factor that influenced the choice of data collection methods was the number of informants from each level. The state and the MNS representatives were only 3 people in total which allowed me to do in-depth interviews. However, interviewing was not possible with the volunteers, because of their number and limited time in the field. A focus group as a method was also excluded as an option, because of time constraints and unethically interference from my side into a company activity and prolonged consumption of their time. Therefore, I decided to choose to interview the volunteers in the form of a self-completion questionnaire that was done before the planting session. This form of data collection allowed me to reach the highest number of informants that was possible. Furthermore, leaving the questions in the survey open gave freedom to the informants to answer with their own interpretation and use their own words and make it possible for the data to be used in qualitative research. This was key for the qualitative analyses that followed, as I needed to code their words and track the discourse that the particular group of informants – representatives of a specific part of society - would construct.

All in all, two participant observations were conducted. They targeted two different groups of people: the locals and the volunteers in the planting session.

4.3 Conducting the interviews

The sampling of the people who were interviewed was obvious since the beginning of the research. My main targets were the managers of the park as representatives of MNS, and the state forestry directors as a main figure of the state opinion on environmentalism.

Prior to the interviews I got in touch with only one of the informants - the SFD - to set up an appointment with him. Regarding the other two informants, I had to get in touch with the executive director of MNS and he referred me to the managers of KSNP and gave me the phone number of M1. I introduced myself to all of the above mentioned people and gave information about my project. After getting their consent, I set appointments for interviews with them.

The very first interview was with Manager 1(M1) of KSNP. He was the person responsible for leading the CSR projects. The discussion took place on a bench in the park, during my first visit of the park and after my walk in the forest in the late afternoon. The interview with Manager 2 (M2) was conducted in his office and it took around one hour, similarly to the first one. The questions were planned beforehand and they followed a certain line. Both of the interviews were semi-structured and non-directive, as they aimed to give freedom to the informants to express their point of view in the best possible way.

The interview with the State Forestry Director (SFD) was organized in a similar way. It was scheduled as the last interview in order to give me time to investigate the case and prepare questions, which would provide useful data. The interview took place in the SFD's office in the Ministry of Forestry in Kuala Lumpur during breakfast. The talk happened in a relaxed manner, which favoured the discussion as some of the questions required more personal attitude. The length of the interview was again around 60 minutes.

4.4 Participant observation and questionnaire

The participant observation of a CSR event organized by a company in KSNP, happened during my second visit in the park. It took half a day – as long as the event continued. The observation was with moderate participation as in this way I found the balance between getting acquainted with the informants so they do not feel burdened by my presence and keeping a distance so not to influence their behaviour and discussions. The observation started with short talks since the arrival of the informants as it aimed to investigate any changes of

behaviour during the CSR event. Another aim of the observation was to validate the data received in the questionnaire.

A questionnaire was appointed for the same informants. It intended to enrich the data from the participant observation and confirm some of the conclusions. The questions were left open as they aimed to keep the informants open minded and provide them only with a light frame. 28 people took part in the survey and it was constructed in a way that would gather demographic data and investigate the knowledge and feelings of the participants about mangroves and to evaluate the CSR event. The questionnaire was anonymous so that it would avoid responding with desired answers.

4.5 Informal conversations and Narrative walks

The method for gathering data from the locals was informal conversations during walks in the villages. They were done for the period of three days and aimed through their leisure style to make participants open to share their feelings towards the mangroves. A special method, called ‘narrative walks’ (or ‘narrative float’ in the case) was employed during one of the talks (Jerneck and Olsson, 2013). A ‘walk’ on the river, between the mangrove trees was taken with a local boatman. It aimed to provoke an unofficial conversation about the forest and put the boatmen in the position of the ‘guide’ in his own environment. This method enriched the data with more interactions on the field. As the majority of the local community did not have profound knowledge of English, neither I had any skills in the local language, I attempted the narrative float with a local friend, who worked for KSNP and was able to act as an interlocutor.

4.6 Limitations of methodology

Due to the inductive nature of the study and the reach out to a lot of informants - the access to participants and primary data kept changing. It mostly depended on their availability, concern and willingness to participate, which kept changing over time. This required extreme flexibility and adjusting during the whole process of the fieldwork. The above mentioned situation multiplied the amount of work to be done and insisted for the attention of the researcher on multiple sites at the same time.

As proposed by Bryman, in order to avoid delimiting of the data to be received and decide beforehand in which box the information will fit, I preferred not to focus on a very specific research question (2012). Therefore, the research was allowed flexibility and the understanding of the social reality of the study had the opportunity to develop in a path unframed by the researcher's view of the world. The above mentioned strategy would allow me as a researcher to avoid any bias and predictive behavior.

Another important point regarding the 'limited structure' strategy is that it allowed me to work out any difficulties in regards to the participants' willingness to cooperate over time. One more limitation was the lack of translator during the whole research process as it deprived the study from in-depth understanding of the local community.

The study was representative of only one case and it did not refer to the conservation reality in the whole country. In order to characterize the actuality of rehabilitation activities in Malaysia, the study needed a wider scope (O'Reilly, 2012). However, a qualitative research needs to understand one or a few case studies in depth in order to produce invaluable information (ibid.)

4.7 Ethical Considerations

Given my focus on the various actors in KSNP and their relations, it was of course important to deliberate on the ethics of my research. This included above all, not sharing incriminating information, should participants choose to divulge anything to me. My short stay in the town was of course enough to illuminate certain structures, but there were inevitably power relations unbeknownst to me and betraying confidentiality could result in harm, be it social or physical (Kvale and Brinkmann, 2009). Names of participants were anonymised but of course the organisation which they represented were necessarily included. Before involvement, participants were as fully informed of the project as possible, including my reasons for choosing this topic and information regarding the document's access once it is published (ibid.). I will also inform people how they can access the thesis once it is written.

Compensation for inclusion in the research process was not offered, beyond a coffee or beverage, if the interaction was to be hosted at a third-party site. I was advised that compensation may sometimes be expected from participants. Nonetheless, due to material constraints as well as being cautious of entering into any deals which may set up unrealistic expectations within the network of informants, I did not offer compensation. During the

course of the research, a number of official requirements became somewhat of an obstacle. However, due to my position as a younger, less experienced outsider from most of my informants, I tried to conform to all of these demands. This was a fine line to walk, as in many instances it became not only a burden, but placed me in a dependent relation to certain figures at relevant institutions, which could alter my results.

5. Findings and Analyses

5.1 Introduction

This chapter presents the data found during the research. Through different methods, different forms of information were collected in order to be analyzed. The structure will be divided into sections relating to informant groups.

The presentation of data will start with participant observation of life in the town of Kuala Selangor and Pasir Penambang, focusing on the locals' attitudes towards mangroves and aiming to look into whether the local population and businesses feel connected to the forest and why. The main focus of the participant observation revolves around people running small businesses, dependent on the health of mangroves to varying degrees. Livelihoods amongst them include shopkeepers, restaurant staff, market salespeople, tourist guides and fishermen.

This will be followed by the results of a questionnaire distributed amongst the volunteers who took part in a CSR replanting event in the mangrove forest of KSNP. These informants are representative of the urban class, working in a large development company. 28 respondents answered the open questions of the survey in order to shed insight on how aware they are of the mangrove situation in general and what motivates them to spend their free time planting trees. The analysis of the data collected, within the theoretical framework of NEP and emotional affinity towards nature, will give an answer to the first question of the thesis and lead the way to answering the second main question.

The third section is a discussion on two semi-structured in-depth interviews with the KSNP park managers. Through analyses of their point of view on the governance of the park, supported by analyses of the document of the management plan of the park itself, the section aims to present one more point of view on the needs of the forest and best strategies of achieving rehabilitation goals. This section will mainly focus on the use of CSR as a strategy

for mangrove rehabilitation.

Fourthly, data from an interview with the state forestry director is presented. It aims to clarify and discuss the state position on mangrove conservation and whether or not it is in tune with the interests of other stakeholders. As an overarching body, the state and its position is of a great importance to the future of the mangroves and livelihoods of the locals. Considering the fact that the state legislates for environmental management in the region, it is important to acknowledge its politics imposed on NGOs, private businesses and big corporations. The analysis of the state view also enables a look at CSR campaigns and NGO - private business partnerships from a different angle. Analysing this last section will enable the research to conclude whether all stakeholders are connected under one common overarching idea or there are mismatches in their values and goals.

Discussing all these levels of participation in mangrove rehabilitation in the case of KSNP will lead to a conclusion, assessing whether multi-institutionalism in this case is healthy or not and identifying the overlapping ideas and values as opposed to those that cannot exist together and threaten the health of the mangrove forest.

5.2 The Locals

In order for the study to answer the research questions, which mainly concern the urban class' understandings and corporate environmental attitude, it needs to start off with the very basics that lay at the local level. The thesis cannot be complete without understanding why there is a need to involve corporate actors based *outside* Kuala Selangor in solving supposedly *local* environmental issues. The research also aims to understand why CSR is taking centre-stage in the KSNP management plan. The root of the problem lies to a certain extent in the community that benefits directly from the mangroves. On that account, initial research was needed to be done in the area, surrounding the mangrove forest of Kuala Selangor.

The best way to approach the locals was through informal conversations. Due to a low level of English-speaking and my lack of a translator, most of the conversations were limited. However, they were enough to reveal the general attitude of the locals towards the mangroves.

I started my research by paying a visit to the nearby village Pasir Penambang, which is situated just over the bridge from Kuala Selangor. The village itself is populated mainly by chinese fishermen and is famous for its fresh seafood from the Selangor river, floating into the

Straits of Malacca. The last few kilometers of the river and its mouth are overgrown with mangrove trees which create a home for many underwater species that feed the local communities and tourists.

Under the blazing sun during the afternoon hours, everything seemed slow-paced and lazy. People were still in the holiday mood of the last few days of the Chinese New Year. Everyone that I spoke to was willing to have a chat with a stranger. As soon as I would direct the conversation towards the mangroves, people would exclaim: ‘Oh! I don’t go there!’. When I would ask them why, I would usually receive an answer of the sort: ‘There are too many mosquitoes’ or ‘It is too muddy there’. Some of the shopkeepers, selling dried fish and shrimp coming from the local mangroves, would claim that there is plenty of stock arriving every single day and even if so they would not be interested to go and see the forest from which their profit is sourced. The peculiarity was that some of the younger sellers were not even aware of the existence of the nature park and mangrove forests in the nearby town.

The answers of the small business holders, their gestures and facial expressions during the small talks started revealing a running discourse amongst the local population that would imply that mangrove forests are not a place appreciated for its aesthetic or recreational properties but just the opposite. Mangroves were perceived by the people that I talked to as a place to avoid, unpleasant and swampy, a place where someone would not choose to go in their free time. They were mostly a source of income to the dry fish sellers, they were also food providers. ‘New commons’ and ‘old’ ones that were there to sustain the life of the community but not much more. If we are to label the local community as a ‘stakeholder’, then the interests of this stakeholder would lie mostly in the economic services that the forest offers. These findings are in tune with a study discussed earlier in the literature review, concluding that with age, appreciation of mangroves dies off (Sawairnathan and Halimoon, 2017). The discourse created by the locals is in contrast with the one created by the urban visitors, regarding appreciation of the forests. A deeper analysis on the urban class’ point of view will follow later in this chapter.

During one of the days of my research, I managed to visit a nearby popular tourist spot in the mangroves - Kampung Kuantan. The aim was to reveal the attitude of people developing businesses dependent on the health of the mangroves, towards the forests. I was accompanied by a girl, working in KSNP who was giving me insight on all that we would see on the way and she would translate when I would have questions for the tour guides. The place is famous

for its fireflies colony that lives only on special types of mangrove trees and feeds on them (Cheng et al., 2017). The fireflies colonies are used as indicator of the health of the mangroves - if the colony is dying off, this means the mangrove is suffering (ibid.). Some resources claim that the fireflies are disappearing because of river pollution or other reasons which meant that the mangrove needs to be taken care of. (ibid.).

When we arrived at the spot, we took a boat with a local boatman and took a closer look at the colonies. Considering that we were in a place that would predispose the locals to share some interesting stories and own experiences valuable to the research, I decided to use a 'narrative walk' (or rather, a narrative float) (Jerneck and Olsson, 2013). During the trip the boatman and my friend from KSNP shared that showing the firefly colonies was only a part-time job for the locals. Usually, during the day they would do another job that would provide them with a more secure income - most often fishing. So it appeared that the boatmen would perceive the mangroves as a source of income and firstly evaluate its economic services. It also became clear that many people that lived in the area sustained their families and themselves on the mangroves. Thus said, it appeared to me as most logical to include the local communities in the protection of these unique forests. According to the managers of KSNP, there used to be programs involving the locals, but these were not able to provide sufficient income for the park to sustain itself. Another reason why the projects with the locals were not a main focus anymore was that the mangroves meant something different to the villagers. Even if the fisherfolk inevitably had an emotional affinity towards nature given their direct material connection to the forest, the mangroves were most of all a tool for rising out of poverty. They, in the very first place, an organism that sustained people's lives. MNS' function appeared to be sustaining the mangroves and therefore - local livelihoods. The interrelation between these bodies was creating a circle of interdependence. The interaction between forest, people and an NGO was an example of a more complex form of symbiosis and institutions taking care of each other. Nonetheless, in order for this symbiosis to be efficient and sustained financially, an outer body needed to be included and MNS found an answer in private business through CSR.

All in all, the locals were interested in the mangroves mainly in an economic way and saw it predominantly as a source of income. This view was developed due to the socio-economic reality of the region. The villagers did not see the forest as a place for recreation even if some of them provided tourist services in the very same area. Their emotional affinity towards

nature that was supposed to create NEP worldview was overtaken by everyday needs. However, the locals place and needs in the network, complexified the role of management in their responsibilities and duties.

5.3 The Management

The research in the park itself took two main directions in order to look at two different levels of participation in the forest rehabilitation process. The study started with conversations with the park managers, providing a closer look into the managerial practices in the park and only after getting to know the priorities of the management and concluding that these are the most significant activities in the park, the research shifted itself towards CSR events and its participants.

My very first visit to the park was planned to happen without getting in touch with anyone involved with the management of the mangroves. I wanted to walk leisurely around the forest without burdening my mind with any initial interviews. I did not want to risk pre-setting my view on how the park is ran either. If one of my research questions was to discuss the emotions triggered in an urban citizen while spending time in the mangroves, I had to immerse myself fully in the atmosphere of this very same forest and try to put myself into the shoes of my future informants without knowing what they actually think. This would have helped me avoid feeling alien to the answers that I would receive on the later stage of my research. However, my plan had to change slightly due to time restraints. On the day that I arrived at the research site, I met with one of the people in charge and arranged to get the interviews only after getting to know the park.

KSNP was divided in two parts depending on the forest type – secondary forest and a mangrove forest as both of them were designated as protected areas suitable for eco-tourism, bird watching and research. There were areas restricted for visitors, which were later described in the interview with one of the managers as too dangerous, because of wild animals and uncleared paths. These were in use only by park staff. During the walk, it became apparent that there was a zone in the mangrove itself that served as a nursery and in a lot of places one could observe that there were recent planting activities. What struck me however, was the fact that all the places with young trees had a plaque with the name of a big company written on it. Later research revealed that most of these companies were in the development business, palm oil, constructions or leading supermarket chains in the region of Southeast

Asia and the Pacific. This became one of the major topics in the subsequent interviews as there was a need to follow up on how the different parties would frame the discourse of corporate interest in conservation areas. It was also tightly connected to the research questions aiming to discover what motivates the single individual to be proactive conservationist and whether or not personal motivations are in conflict with corporate ones.

The interview with Manager 1 (M1) and Manager 2 (M2) revealed to a certain point the relationship between park authorities, locals, private business, nature.

Firstly, it became apparent that the results of the participant observation of locals in the nearby villages, preceding all the official interviews, had consistent links with the findings from the managers. According to M1 and M2 the locals were difficult to involve in conservation activities due to their different attitude towards the forest, as well as them having more pressing concerns.

During the talk, M2 made clear that their most important task throughout the years since the park's establishment, was to locate funding to fulfil one of the main objectives of KSNP - rehabilitation of the mangroves.

The main objectives of the park, according to the management plan of year 2016 are:

- Conservation and Scientific Research site for Mangroves and Birds
- Environmental Education Awareness Centre
- Sustainable Ecotourism and Recreation site
- Centre of Excellence for Wetland conservation and East Asian bird Flyway site

(KSNP Management Plan, 2016/17, p.4)

During the interviews with the two managers, it became obvious that education is one of their primary objectives as 'ambassadors' of the mangroves. As stated in the management plan of KSNP, most of their activities 'are primarily meant for visitors who are interested in learning about the coastal environment in relation to its flora and fauna.' (KSNP Management Plan, p.18). For the managers of the park, it was very important to 'empower' people with knowledge about the mangroves. It was essential for the research to locate the target group meant for empowering and the reasons behind that decision. According to the management

plan, in order to ‘[i]ncrease relevant community & visitor participation’ (*ibid.*), companies’ staff and local communities were supposed to be the focus of KSNP educational activities.

‘People who [...] by education know well about the mangroves but they are the people who pollute the mangroves’ (M2). For him, the distance from nature and the lifestyle that people in the city were leading were behind their disregard for the mangroves. Therefore, it was important for these people to experience nature as a phenomenon and to allow it to influence their feelings, thoughts and future pro-environmental actions.

Meanwhile, the locals, most of which did not have higher education, had their own understandings and ways of conserving. Alongside, the question of illegal activities within the territories of park existed and it was made apparent that the socio-economic situation of the villagers was behind their attitude towards the mangroves. These illegal activities were identified as one of the issues that the park management needs to solve. In the management plan the ‘[l]ack of awareness on the importance of sustainability and biodiversity amongst the poachers and local communities in the area’ (*ibid.*) was a main issue along with illegal harvesting of timber and sea food. However, in practice during the interview with M2 and M1 it became apparent that the above-mentioned are minor issues. Due to the complex nature of the problem deriving from the relationship between the park managers and the local poachers, there were unspoken rules for mangrove usage. During the interview, M1 identified himself as a local and aware of all the economic difficulties that the local population has.

M1: *‘I grew up here and my father was bringing me to the mangroves. I know their way of thinking.’*

Probably due to this aspect of M1’s identity, loose rules regarding the illegal harvesting of mangrove resources existed. Slowly, it started becoming apparent why the educational activities that KNSP was organizing were targeting a different group of people. As people neighbouring the ‘poachers’ and managers of KSNP at the same time, M1 and M2 had to juggle with their social position in the town of Kuala Selangor and try to maintain respect as leaders of KSNP as a protected territory as well.

Another identity that M1 and M2 had was of environmentalists and their view on how locals were using the forest was crucial for the success of the mangrove conservation. It seemed to me, as an outsider, that there is a mismatch of values, frequently recognized in conservation

activities of ‘new commons’. ‘Cognitive dissonance’ (Duraiappah et al., 2014) as described in the theory chapter was clearly guiding the execution of KSNP management plan.

When asked if locals are interested in conserving, M2 answered:

‘they do conservation but their own style. They don’t need an institution. They are living inside this so their thinking is different. But people who are living outside [...] - their idea is different.’

In this sense, KSNP was serving not only as a place to preserve nature and to present it in a limited version to irregular visitors but it had another role as well. KSNP was a place that represented ‘the new commons’ and their successful distribution amongst the different groups that used the forest. The park was also a ‘bundle of ecosystem services’ that allowed the preservation of cultural ecosystem services by letting locals treat the forest traditionally without the heavy burden of an official institution restricting their cultural freedom.

5.3.1 Money does not grow on trees

One of the leading concerns for decision-making in KSNP was the financial situation. One of the managers of the park kept bringing up the subject of funding:

‘After 1995 all sorts of funding finished ... you need to self-sustain ... even the government didn’t have money to support. So, how much can we do to self-sustain the park? Doing a lot of projects like CSR.’

The existence of the park was in the same lines as the existence of the local communities – it was strongly dependent on the socio-economic realities. The tough economic situation of the region was framing the life of the locals and the governance of the park. The discourse of ‘self-sustainment’ was powerfully prevailing during the whole research and it was made clear that the state government did not take part in financing KSNP projects nowadays. Thus said, the political reality was additionally challenging the healthy existence of the park, regarding finance.

Given the above mentioned circumstances, financial difficulties, and need of mangrove resources for the locals, KSNP shifted its financial focus towards private business and big corporations.

'So we focus on the companies. Because a lot of companies - they want to do their CSR programs and to the end of 2004 (after the Tsunami) then the mangrove planting became suddenly like trendy...everybody wants to do mangrove tree planting. So [with] our program officer we arranged mangrove tree planting... so they can come and support us.'
(M1)

In the year 2015/2016, a bit more than half of the budget was generated by 'activities' - 270 000 RM out of 525 000 RM (KSNP Management Plan, 2016/17). In the same period, two main 'green partnerships' were established as well. KSNP's partners were a big bank, based in Kuala Lumpur and two more corporations, which are known as development companies (*ibid.*).

During the interviews, it became apparent that the relationship between KSNP and the 'green partners' was one of mutual interest as planting trees was a very common way to do PR for a company. As mentioned earlier in this thesis, the sustainability discourse was one of great importance in Malaysia. A company with a 'green' image, conducting regular CSR events was developing in tune with the new 'sustainable' image of Malaysia itself. In order to gain a competitive advantage, companies would engage with eco-friendly initiatives such as tree planting (Petts et al., 1999; Nejati and Amran, 2009; Revell and Blackburn, 2007) and would use KSNP as a step towards more successful business.

5.3.2 The controversy

By definition, CSR is a business activity that ensures companies conduct their activities in a responsible way towards nature and society (ASEAN CSR Network, 2015). As previous research suggests, the values surrounding CSR are ethical and derive from a moral obligation towards society and nature (Longo et al., 2005). However, it comes questionable in the case of KSNP partners, considering their previous and or current business activities that lead to threatening mangrove land for development.

A basic online research revealed that the partner companies from the period 2015/2016 and 2017/2018 were major development companies working within the territories of Malaysia and neighbouring countries. In the sphere of their wide-range activities were construction works and development of palm oil plantations, recognized as major threats for mangrove forests due to deforestation activities.

Thus said, a possible conclusion would be that the so called ‘green partners’ were not taking part in the reforestation activities out of ideal values deriving from an environmental mindset and care for nature. It seemed more likely that pure business interest was leading the eco-campaigns, taking place in KSNP.

The managers of KSNP made clear that they are fully aware of the PR strategy of their green partners during CSR activities. Nonetheless, such cooperation was reappearing throughout the years in the management approach of the nature park. Yet again, cognitive dissonance based on their moral values as conservationists was apparent in the behaviour of M1 and M2. During the interviews, even if I would raise the point of the above-mentioned controversy, the question was avoided. Whether the reason was an unclear business relationship, degraded moral values based on challenging economic reality, or otherwise – remained unrevealed.

To sum up, the managers’ reactions gave the impression that their work as leaders of the park and at the same time part of a community economically dependant on the mangroves, was complicated by a mismatch of values. They had to preserve the park by profession and to take care of their community as good neighbours.

The main running discourse in the conversations with the managers of the park was ‘self-sustainability’. It appeared that their most important mission is to locate funding for KSNP. They believed that in this way they will sustain not only the park but to a certain extent - the local community as well. M1 And M2 were motivated to establish conservation activities in KSNP by their NEP worldview and also, ethical duty towards the community. They also targeted CSR as a main source of funding for the park and placed it centrally in the management plan of KSNP. Most of their efforts were made towards establishing partnerships with corporations and creating a stable symbiosis between business and nature park.

5.4 The Volunteers

A very significant part of the research was gathering information from the volunteers who were planting trees on a CSR event. This information was vital for the thesis as answering the research questions was based mainly on the opinion of the urban people that were immersing themselves into environment that was unnatural for them. Discovering their motivations to do planting and their feelings during their stay in the forest was crucial for the study mainly for

the reason that these volunteers were the ones practically executing the process of reforestation. The collected data sought to reveal how connected, overlapping or conflictual the personal and corporate motivations engaged in a CSR event are.

The collection of data from the volunteers was handled in two stages. A questionnaire with open questions was spread amongst the participants and later, participant observation was conducted during the planting event. The informants who took part in the questionnaire were 28 in total. 25 of them were staff in the development company that was organizing a CSR event with planting activities and lectures on mangroves. The other three were family members of the staff. The questions asked, aimed to reveal the extent to which the informants were aware of the significance of mangroves and their state in general. The survey also sought to unveil what feelings the forest would trigger within the volunteers.

5.4.1 Constructing a New Environmental Paradigm worldview

All of the respondents were urban citizens and the majority of them were born and raised in cities, far away from mangroves. The common reason for the informants to come to the mangroves was the CSR event, organized by their company. However, a few of them pointed out other reasons like ‘love of nature’, ‘to preserve the nature’, ‘to experience traditional planting’ and to gain ‘knowledge on conservation’. Pointing out reasons, other than the obvious, informants showed that they were interested in the event not only because they would get credit from their company but out of genuine interest. It is of a great importance for the assessment of ‘emotional affinity towards nature’ whether one would have childhood memories in a specific place, or would spend more time there in order to feel attached to the place at a later stage in life. Hence, a significant question in the survey was if the informants have ever visited mangroves and how often. Those people who grew up in cities far away from mangroves responded with ‘no’ but the ones who grew up near such forests answered with ‘yes’ and added a significant number of visits. These were also the people, who responded to all the questions in a pro-environmental manner. Regarding the informants’ feelings for the forest, only two out of 28 responses were negative – ‘anxious’ and ‘afraid’ and all the rest expressed a positive attitude framed as ‘excited’, ‘relaxed’, ‘fresh’, ‘peaceful’ and ‘happy for the first time [in a long time]’. The feelings that the forest would trigger in the volunteers were the very same ones that would take part in the formation of emotional affinity towards nature. This process was essential in the construction of a worldview, opposing fast economic development, or in other words – New Environmental Paradigm.

During the participant observation of the planting process, the informants showed excitement and eagerness to participate. They were not appalled by the muddy surroundings, nor by the fact that they had to go up to their knees in the mud in order to plant the saplings. Their experience was one based on using senses in the outdoors and it seemed that the participants were open to immerse themselves in the surroundings. Hence, the CSR event inevitably led the way to creating affinity towards the very same forest that the volunteers were experiencing. The atmosphere was positive and many participants shared the view that they are the ones who have to take care of nature. Members of their families accompanied many of the company staff. Sharing such experiences with ‘significant others’, or family members in the case, was one more factor that was vital in building an NEP worldview.

5.4.2 Ideal values in conflictual reality

The participant observation and the answers to the questionnaire both suggested that the participants were pro-environmentally minded with strong ideal values.

When asked about the importance of mangroves, only one person answered with ‘I don’t know’, and another one did not respond at all. 26 of the informants were aware that the mangroves are important mainly for ‘protection’ and are vital for the ecosystem as well. Ten of the participants in the survey pointed out that ‘development’, ‘cutting trees’, and ‘construction’ are main reasons for the mangrove degradation. The peculiarity in the case was that most of these pro-environmentally oriented people worked in a development company with a big percentage of the business in the oil palm plantations development. As mentioned above, this type of business was one of the main reasons for mangrove degradation. This reality inevitably led to questioning the level of environmentalism of the CSR participants and suggested mismatching values within the community of volunteers as well.

When asked who should be responsible for the preservation of mangroves, the majority of informants recognized themselves, together with all the institutions involved as responsible. They found multi institutionalism acceptable if not advisable as a governing system in the environmental field. They also recognized CSR as a successful method for restoring not only nature but also the relationship between nature and human. Thus said, CSR is a method that might be exploited as PR strategy for business success by the company, which is organizing it and the original ideal values supposedly existent in the base of CSR might be lacking. Nevertheless, studying this particular CSR event showed that it created a bridge between people and nature on the personal level. It also provided the volunteers with environmental

experience, which provoked their thoughts on the health of mangrove forests. In this case study, CSR could be considered an ambassador between forests and people and also a method that is successful in terms of effect on the individual, regarding environmental conservation.

The CSR event worked out finely in laying a base in the construction of NEP worldview of the volunteers. It started off with providing time spent in nature with significant others. All of the participants expressed positive attitude towards the planting initiative, organized by their company and showed pro-active environmental behaviour in their responses in the questionnaire. The volunteers recognized multi institutionalism as a method for resolving environmental issues and CSR as a successful activity for rehabilitating forests. Some of them also pointed out development as one of the main threats to mangroves. However, they did not recognize the fact that they, themselves worked in a big development company. It was apparent that a contradiction on a higher level existed but on a personal level, CSR worked out finely.

5.5 The State

In the case of KSNP, an institutional approach needs to be applied due to the number of institutions influencing the governance of the park. A full understanding of the conservation strategy implemented in KSNP cannot be achieved without a discussion on the state involvement. First and foremost, the state is the land owner in the park or in other words the institution with the most power and authority in the decision making process. However, in 1987 when KSNP was established after lobbying against the creation of a golf resort on the site, the state granted managerial functions to MNS. Since then, the NGO has been preparing the management plans of the park and taking decisions on its governance.

In order to provide insight to the historical and current situation of KSNP from the state perspective, an interview with the state forestry director of Selangor state was taken. According to him, the way to govern best the forested territories of KSNP was to hand them to experts who do not belong to the state structure. It seemed that the state was also keen on multi institutionalism, regarding the governance structure of nature parks. Regardless, the forestry director implied multiple times that the structure is not horizontal and '*MNS have no power*'. However, when the conversation shifted towards the business involvement in the management strategy of the park, the director was certain that '*it is none of my business*', although earlier in the conversation he stated that the best form of financing the park was state

funding. It seemed that the function of the government, regarding the park was either dumbed down or just craftily presented as such. The subject of CSR and corporations' involvement in the financing of the park was inevitable as CSR was the main financial tool for KSNP. When asked about the above-mentioned, he did not have much to say, as he claimed that he did not have much knowledge on the financial operations in the park, stating that financial statements were submitted to the local council. The SFD's personal opinion on the matter of involving development companies in the funding of the park and the way they affect the mangroves gave me the impression that he did not want to lay the blame on any company or activity which may (or may not) impact the mangrove. This was particularly the case when we were discussing the decline of the fireflies, which he was keen to point out was not due to anything specific (as far as we know). He insisted on having strong scientific proof before assuming who or what is to blame.

5.5.1 Institutions corresponding without correspondence

At the same time, one of the campaigns of the state forestry director was to acquire a RAMSAR statute for KSNP. At the time of the research, there were only a few more months left for the final decision whether KSNP is to be granted RAMSAR or not. An important part of acquiring RAMSAR was to develop the infrastructure in the park and make it more accessible for eco-tourism and research. The development companies in partnership with KSNP, had the task to work on improving the paths, accommodation and research center in the park. It was clear that state was working towards strengthening the protection of KSNP as they were the ones who focused mainly on getting this new status, while MNS did not mention RAMSAR during the interviews of M1 and M2 at all. It seemed that these two different institutions were working in tune, trying to accomplish one goal - keeping the park functioning and efficient. It was peculiar that the state and the NGO followed their own paths for doing so, without putting the same importance on the subjects, if we consider the different discourses created by both institutions.

As the thesis seeks to find out what motivates people to involve themselves in a specific way in conservation activities, it was vital to explore in depth which were the factors (engaged with emotional affinity towards nature) that influenced the behavior of the State Forestry Director (SFD). His main cause at the moment of research was RAMSAR and he implied multiple times that achieving this is his responsibility.

When I moved our discussion towards more personal matters I insisted on asking one question – ‘What is the forest for you?’. Asked in this very way, the question was supposed to avoid delimitation of the subject by not giving a time or a subject frame. I wanted to give the SFD the freedom to share what was dearest to him, regarding mangroves. He said the following:

‘I grew up in the mangroves. When I was a little boy, my father worked as a forester in the mangrove. He used to take me with him in his boat. Later in my life, I started working in Matang mangrove reserve [one of the most significant mangrove territories in Peninsular Malaysia]. I spent long years there and I brought up my children there as well.’
(SFD)

His answer contained clear indications of emotional affinity towards nature. Theoretically, affinity requires childhood memories to nurture it. It also needs significant others to strengthen it. The story of the SFD made obvious that the base for NEP worldview and pro-environmental behaviour was laid in his early childhood and strengthened in his middle years. The SFD made it obvious that he was extremely proud of what the state achieved in terms of environmental legislation. This might also be part of the reason why the state of Selangor was one of the most pro-active states in Malaysia in regards to actions for preserving nature. Selangor is the only state in Malaysia which made commercial mangrove logging illegal and it kept strengthening environmental politics.

It appeared that the political reality could be influenced in a way, by basic life experiences feeding positive emotions towards nature. Personal stories, developing NEP worldview could be advanced into political decision making with a progressive turnout for the environment. It seemed that emotional affinity towards nature, constructing NEP worldview was a consistent part of the decision making on the State level. Maybe it was not the main factor for such strong environmental political agenda but it definitely influenced the behaviour of the SFD and his motivation for pro-environmental attitude had a personal touch. Regarding the role of CSR in KSNP, the state did not show particular interest in the financial tools used by the park management but also did not wish to problematize the questionable link.

6. Conclusion

This thesis sought to shed insight to the complexities of mangrove conservation in Peninsular Malaysia through answering two main questions. Firstly, it aimed to reveal how and why people engage in conservation activities based on personal motivations and secondly, it intended to unveil the role of CSR activities in the case of KSNP. The study explored a more personal side of the conservation activities in order to reveal how people are motivated to act pro-environmentally. With the help of the theory for emotional affinity towards nature and NEP, the thesis followed through the construction of a worldview, which was projected in conservation activities and framed in a CSR event in KSNP. I designed my research in way that would help me find out what the connection between personal motivations and corporate ones is.

Alongside, the study used an institutional perspective, as the structure of the park was such that it supposed the involvement of multiple institutions with influence on the park - locals, NGO, a development company's staff as volunteers in planting activities and the State. All these created a specific interdependent network and the attempted research tried to track the connections between these institutions, the way they influence each other and their attitudes towards CSR as a forest restoration method in KSNP.

The findings illustrate how the local villagers who had direct material connection with the forest did not show primary interest in the health situation of the forest, neither in the conservation activities, organized by KSNP. Many of them showed ignorance or simple lack of knowledge about the condition of the mangroves. Even if some of them (fisherfolk, boatmen) were supposed to have developed affinity towards nature as they have spent significant amount of time inside the forest, they did not show particular signs of NEP worldview. A possible explanation of this attitude was the socio-economic situation in the region placing conservation thoughts on the background, opposed to feeding the family as a primary everyday goal of the locals.

In addition, the managers of KSNP also had to take into consideration the socio-economic reality and use it as a main driving force for creating the management strategy of the park. The results of the research showed that the main running discourse during the interviews with the managers was 'self-sustainability'. The research located two main motivations for M1 and M2 to behave pro-environmentally - NEP worldview and ethical duty towards their

community, which needed the mangrove products. On one hand, there was a mismatch of values, which additionally complexified the way of governing the park by letting people illegally use the mangroves. On the other hand, the managers were additionally motivated to rehabilitate the park in a better way that would benefit not only nature but also poor local communities. A way of solving the issue was the involvement of one more institution in the structure of the park as a financing tool - private business. More than half of the budget was predicted to be provided by CSR activities and most of the efforts of the managers were situated in organizing CSR events, which would deliver the needed funds for running the park. The analysis estimates this situation as a strong argument for the success of multi-institutionalism in the case of governance of KSNP.

Another main argument of the thesis is that emotional affinity towards nature and further developing of NEP worldview could be successfully nurtured during CSR events. The company staff, that took the role of volunteers in the planting event showed all signs of pro-environmental behaviour and positive attitude towards the mangroves. The main motivation of the volunteers was the moral obligation towards nature, the responsibility to take care of it and the positive emotions that the forest gave them. The results also clearly showed that CSR was highly approved practice for conservation amongst the company staff. However, the participants did not recognize the questionable side of the involvement of a big development company as theirs in the structures of the park. Even if the managers of the park pointed out PR as a main reason for the involvement of the corporations in KSNP, the results of the research showed that the volunteers' motivations did not correspond with the corporation's aspirations. Thus said, the study argues that the personal interest of the staff in conservation does not align with the business strategy of the company itself.

Regarding the state inclusion in the case of KSNP, the SFD did not want to appoint a specific discourse on the subject of companies involvement as a funding strategy. I see that as a political move, which avoids problematizing potential questionable subjects which might lead to important links in the multi institutional network of KSNP conservation activities. However, the study revealed that multi institutionalism was a favoured governance form of governing of nature parks as the state itself chose to assign MNS as responsible for managing the park. The state's argument was that different experts are needed for the benefits of nature. Another finding of the research was that the politics of the SFD were partially guided by his NEP worldview, established in his early childhood and strengthened throughout the years by

affiliation with nature and spending time there with significant others - family. He felt personally responsible for acquiring RAMSAR statute for KSNP and also proud of the state legislation towards strong environmentalism. His personal motivations were projected into his political agenda and explained to a certain point the pro-environmental statute of the state of Selangor.

In conclusion, this thesis tried to shed light onto a single case of mangrove conservation activities. As a result, it found out that multi institutionalism is a favored structure in the case of KSNP by all of the participants. The study also revealed that personal motivations combined with NEP and no socio-economic restrictions, benefit conservation activities. Also, emotional affinity towards nature was able to nurture and strengthen NEP. Furthermore, it discovered that CSR plays a major role in the rehabilitation of KSNP forest, regarding generating budget, managerial efforts and allocation of human resources. CSR was also used as an education method for constructing a NEP worldview within the volunteers at the planting events, and turning them into ambassadors of moral obligation towards nature.

KSNP is only one example of how mangrove rehabilitation activities are conducted but the thesis aims to highlight which the successful managerial strategies are and points out the factors influencing people to behave pro-environmentally. Undoubtedly, some of the discussed practices can be adopted only by specific structures. However, the knowledge gained with the help of all the informants was invaluable.

Some of the problems were just touched upon and need further research. One such issue was deeper understanding of the meaning of the forest for the locals, which was impossible to be understood in depth in the case of this research due to language constraints.

Another area to benefit by further research would be exploring in depth the connections between big development companies with the state and with environmental NGOs. Such research would be needed to unveil hidden political agendas and financial networks. However, due to the sensitivity of the subject and time restrictions, it was difficult to uncover this line of interactions at the time of my own research.

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