

Examining Protected Areas in the Face of Decentralisation: Lessons Learned from the Ir.H.Djuanda Grand Forest Park, in West Java- Indonesia

MASTER THESIS

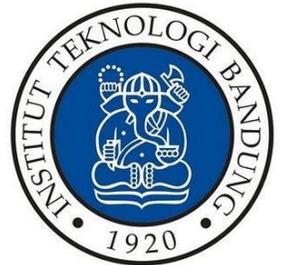
**A thesis submitted in partial fulfilment of the requirements for
The Master Degree from University of Groningen and
The Master Degree from Institut Teknologi Bandung**

**By:
Muhamad Idrus
RUG: S2286130
ITB: 25411041**

**Supervisors:
Dr. Constanza Parra Novoa (RUG)
Ir. Teti Armiati Argo, M.E.S., Ph.D (ITB)**



**Double Master Degree Programme
Department of Regional and City Planning
School of Architecture, Planning and Policy Development
Bandung Institute of Technology
And
Environmental and Infrastructure Planning
Faculty of Spatial Sciences
University of Groningen
2012**



**Examining Protected Areas in the Face of Decentralisation:
Lessons Learned from the Ir.H.Djuanda Grand Forest Park,
in West Java- Indonesia**

MASTER THESIS

**A thesis submitted in partial fulfilment of the requirements for
The Master Degree from University of Groningen and
The Master Degree from Institut Teknologi Bandung**

**Double Master Degree Programme
Environmental and Infrastructure Planning
Faculty of Spatial Sciences
University of Groningen**

And

**Department of Regional and City Planning
School of Architecture, Planning and Policy Development
Bandung Institute of Technology**

Approved Supervisors:

Date: August, 2013

Supervisor 1

Supervisor 2

**Dr. Constanza Parra Novoa
(RUG)**

**Ir. Teti Armiami Argo, M.E.S., Ph.D
(ITB)**

Abstract

Transformation of governance system is essential to deal with complexity over protected areas (PAs) management. Currently decentralisation is seen as a desirable way to achieve a better performance of PA. However, in reality the conception to decentralised PAs faces some difficulties since various governance systems are involved. This thesis aims to examine the dynamic impacts of current decentralisation policy over the management of the Ir. H. Djuanda Park (the Djuanda Park) in West-Java Indonesia. Instead of improve the sustainability of the park, the park faces new challenges after its management has been decentralized. Based on the Djuanda Park case, a strong law enforcement and commitment from all different stakeholders at various scales are needed to deal with the challenges.

Key words: Governance, Protected Areas, Decentralisation, The Djuanda Park

Guideline for Using Thesis

The unpublished master thesis are registered and available in the library of the University of Groningen and Institut Teknologi Bandung and open for the public with the regulation that the copyright is on the author by following copyright regulation prevailing at the University of Groningen and Institut Teknologi Bandung. References are allowed to be recorded but the quotations or summarizations can only be made with the academic research regulation for the process of writing to mention the source. Reproducing and publishing some part or the whole of this thesis can be done with the permission from the Director of the Master's Program in the University of Groningen and Institut Teknologi Bandung.

Acknowledgement

Alhamdulillah to Allah SWT for blessed me and given me an opportunity to continue my master study in ITB and RUG. I consider that many people and institutions are involved to support the accomplishment of the thesis. First, I would say thank you to my supervisors Dr. Constanza Parra Novoa and Ir. Teti Argo Armiati M.E.S P.hD for the patience and meaningful advices for the improvement of the thesis. Well, personally it is an honour for being your supervised-student within the last two years.

Second, I would like to say thank you to my parents who had raised me well and taught me about life. For my brothers and sisters who already become my second parents since I was in elementary school, thanks for your kindness. A special dedication to my wife, Hastuti and my little daughter Dahayu Amanina Gaoki who always cheer me up when I was down and understanding me when I faced difficulties during my study both in ITB and RUG.

Third, thank you to my friends and colleagues from Double Degree Master Program ITB-RUG. Guys you all were awesome and it was great to become your friend. We spent a lot of time to enjoy both hard times and fun and I realised the essence of friendship with you. For my other Indonesian friends in de Gromiest and PPI Groningen who always shared your experience regarding study in Groningen I would say thank you. I realised that financial support is the most important for my study. Thus, I would say thank you to BAPPENAS and NESO for choosing me as the awardee for this master program and to my office at the Ministry of Forestry that already supported me during these last two years. Finally yet importantly for my interviewees from Ministry of Forestry, Bandung Municipality, Bandung Regency, the Ir. H. Djuanda Park Office, WALHI, PLTA Bengkok and local people in Ciburial village I would say thank you for taking the time during interviews.

Finally, to other colleagues that I might forget for the contributions to the improvement of this thesis, I say thank you and may Allah SWT repay what you have done with kindness. Ultimately, I hope this thesis can bring benefits to those who read it and I admit that this thesis is far from perfect, hence the criticism and suggestions for improvement in the future is the author expected.

Groningen, 21 August 2013

List of Contents

List of Contents	vi
List of Figures	vii
List of Table	viii
Chapter 1 Introduction	1
1.1 Background	2
1.2 Research Problem	2
1.3 Research Aims and Questions	3
1.4 Research Methodology	3
1.5 Thesis Structure	5
Chapter 2 Theoretical Review	7
2.1 Introduction	7
2.2 Renewal Governance System Within Environmental Policy	8
2.3 Multi-level Governance and Complexity in Governing Protected Areas	11
2.4 Decentralisation of Protected Areas: An Overview	16
2.5 Buffer Zones of Protected Areas	24
2.6 Conclusion	26
Chapter 3 Empirical Tools for Data Collection and Analysis	27
3.1 Introduction	27
3.2 The Djuanda Park and The North Bandung Area: A Brief Overview	37
3.3 The Development of the Djuanda Park	30
3.4 Methodology in Gathering Data	34
3.5 Framework for Data Analysis	35
3.6 Conclusion	36
Chapter 4 Transformation Path of the Djuanda Park Governance	37
4.1 Introduction	37
4.2 Decentralisation of Forest Sector and Grand Forest Parks in Indonesia	38
4.3 Main Contemporary Challenges of the Djuanda Park Governance	48
4.4 Impacts of Decentralisation the management of the Djuanda Park?	50
4.5 Conclusion	62
Chapter 5 Conclusions and Recommendations	64
References	68
Appendix	73

List of Tables

Table 1	Forms of Decentralization and its Definition a	16
Table 2	The Typology of the Degree of Participation	20
Table 3	The Establishment of the Djuanda Park	32
Table 4	Type of Participants during interview	33
Table 5	Steps of Analysis Data	36
Table 6	Lists of Grand Forest Parks (Tahura) in Indonesia	43

List of Figures

Figure 1	Research Design	6
Figure 2	Good Governance and its Characteristics	10
Figure 3	The Growth of Protected Areas Designation in the World	13
Figure 4	The Growth in Global Extent of Protected Areas	13
Figure 5	Forms of Decentralisation	16
Figure 6	Type of Conservation in Practice	23
Figure 7	Zoning Areas of Waterton Biosphere Reserve, Canada	24
Figure 8	IUCN Zoning Categorisation of Protected Areas	25
Figure 9A	Land-Use Map of the Djuanda Park And North Bandung Areas (Eastern Part)	28
Figure 9B	Land-Use Map of the Djuanda Park And North Bandung Areas (Western Part)	29
Figure 10	The Chronology of the Decentralisation of the Djuanda Park	44
Figure 11	Timeline of the Djuanda Park Governance System	45
Figure 12	A 3-dimesion of the Djuanda Park and its Surrounding Areas	46
Figure 13	Water Distribution Pipe along the Road	47
Figure 14	Road as a Separator between the Djuanda Park and the Settlement	48
Figure 15	Map of the Area Affected by Landslides and Floods in Bandung	51

CHAPTER 1

INTRODUCTION

1.1 Background

There will always be a dynamic process in exercising power and authority over resources among various levels of governance. Doubts about centralised systems notably in developing countries encourage society to redistribute authorities over natural resource governance via decentralisation (Larson & Soto, 2008). Decentralisation aims to develop accountability, to create a more precise problem structure and to trigger local participation by bringing decision-making processes closer to those affected communities (Lemos & Agrawal, 2006). Meanwhile, in a broader context, decentralisation is also perceived as a product of state-rescaling (up-scaling to global direction and downscaling to local) under notions of multi-level governance and also presently used towards sustainability of territories classified as protected areas (Parra, 2010). Thus, decentralisation is seen as a way to effectively create a governance transformation of protected areas. How decentralisation concept does apply into practice for the protected areas governance? Moreover, to what extent the notions of decentralisation perceive by various governance systems and eventually enhance performance of protected areas management? These questions lead to debate in bridging the gap between the concepts of decentralisation with reality.

The delineation of protected areas (PAs) becomes a current trend around the globe as a means of pursuing sustainable development. Protected areas have huge anthropocentric benefits that range from recreational activities, research, education, biodiversity preservation and historical values (Dudley, 2008). By having those functions, governing PAs is not as simple as expected. They have complexity issues both function and structure which characterised by uncertainty, multi-perspective, multi-actor, multi-scalar, inclusiveness, multi-disciplinary and so forth. Accordingly, it leads to debates on which approaches should apply, what management styles should be proposed and which governance systems are better to deal with the socio-ecological

complexity of PAs. This thesis, therefore aims to explore decentralisation policies and its impacts on PAs, more specifically it will look at the Ir. H. Djuanda Grand Forest Park (The Djuanda Park-onwards) in West Java Indonesia, a protected area decentralised since early 2000.

The Djuanda Park is chosen as the case study for this research due to several reasons. First, the Djuanda Park, compared to other PAs has a wide variation of attractiveness ranging from biodiversity, environmental services, socio-culture attraction, environmental education and historical sites. Second, the park lies within the North Bandung Area (NBA) that consists of several PAs; one of them is Tangkuban Perahu Natural Reserve. In terms of size the park is categorised as a small conservation, area which only 590 Hectares (JabarProv, 2010) compared with Tangkuban Perahu natural reserves that reaches around 1,660 Hectares (Dishut Prov, 2008). Apart from that size, the park's environmental service values are priceless. For instance, the park is regarded as part of the upstream of Cikapundung river basin areas that its flows used for power generation and drinking water supply for the region and surrounding areas of Bandung. Third, the park contains many scenes and the story behind the naming and workmanship. There are three important histories that should be noted in this regard, namely: the history of international relations between the kingdoms of Padjadjaran and Chulalongkorn (Thailand) in the past, the history of Indonesia under Dutch and Japanese colonialism and the struggle for independence. Fourth, in terms of socio-institutional arrangements is divided by three different municipalities namely Bandung Municipality, West Bandung Regency and Bandung Regency that are associated as the Greater Bandung Area. Thus, it is interesting to study the role of each different scale of various governance systems over protected areas issues.

This thesis aims at giving new insights regarding decentralisation of the management of PAs under multi-level governance corridor. Lessons of a 10-year decentralisation experience as the one of the Djuanda Park can be an instructive experience for others working on sustainability of protected areas.

1.2 Research Problems

Defining the concept of decentralisation and reality of protected areas governance creates a gap in between. The gap occurred due to protected areas governance are complex, multi-perspectives to conceive, related to socio-political consensus, involved multi-actors and so forth. Capturing the implementation of decentralisation concept into a practice of protected areas management is what the thesis directed of. Thus, the thesis is expected to become a piece of work to fill a gap in the reflection on protected areas and their governance.

1.3 Research Aims and Questions

The thesis aims to examine the impact of decentralisation policies and multi-level governance framework on protected areas in Indonesia. Two research questions are raised to address the aim as follows:

1. Do decentralisation and multi-level governance enhance sustainability of protected areas in Indonesia?
2. How and to what extent the current decentralised governance system impacts (positively and negatively) the sustainability of the Djuanda Park?

1.4 Research Methodology

In order to answer these research questions some data and information are needed via exercising field research on case study area. The methodology of the thesis used a qualitative approach that attained through two data collection categorised as below (Neuman, 2000):

1. Primary Data

This type of data was gathered through direct observations in the field (The Djuanda Park Site) and interviews with privileged stakeholders. Both methods provided a general overview on current condition of the Djuanda Park. Besides that, interview-based information gave a new insight to construct a full story-telling of decentralisation and its impacts on the sustainability of the Djuanda

Park functions. Methods for interviews were adopted from social research methodology literatures for qualitative data collection written by Neuman (2000) and Torkar, et al. (2011). Meanwhile, interview processes referred to the ethical procedure for conducting social research (Vanclay, et al., 2012)

The Djuanda Park office staffs were intensively interviewed in order to gain deep understanding particularly on management effectiveness under decentralisation and multi-level governance nodes. Notable events and remarkable policy planning were written down through notes. Recording during interview sessions was done to regain missing issues and to reconstruct the story line of decentralisation. In brief, methodology in attaining primary data was mainly to generate information of the Djuanda Park, governance systems and management style for a better understanding of the impacts of decentralisation for the sustainability of the park.

To begin with, portraying socio-spatial circumstances after decentralisation of The Djuanda Park were essential to gain a brief picture of the area. Some stakeholders from the public sector include central state institutions namely: Ministry of Forestry, Ministry of Environment and Ministry of Domestic Affairs and lower level government agencies as the park managers, Bandung Municipality and Bandung Regency. Meanwhile, non-state institutions include local communities, NGO's, experts, and corporates. Those two types of institutions were interviewed during study. They have the ability to share the ideas on how managing the Djuanda Park based on their own perspectives regarding constraints and opportunities.

2. Secondary Data

This type of data was obtained through the analysis of relevant documents (rules, regulations, planning documents, maps). Collecting these data was done through internet browsing as well as directly visited state and non-state agency offices. Secondary data was also examined by content analysis method, which

emphasises on confidential-relevant information from theoretical reviews, newspapers, and internet.

2.5 Thesis Structure

The thesis is structured into six chapters. Aside from the chapter one that has been written, each chapter has different content of study as showed in figure 1:

Chapter 2 Theoretical Review

The chapter explores theories used that focused on multi-level governance and decentralisation notions for the context of protected areas. A current debate on governance over natural governance is also raised within the chapter. Discourses of decentralisation over natural resources within protected areas are main theme of this chapter.

Chapter 3 Empirical Tools for Data Collection and Analysis

This chapter explains the methodology of the research stagers and providing underlying notions for selection of privileged stakeholders. The empirical tools for data analysis were mainly adopted from Parra (2010). In order to simplify information for readers, research findings are presented and summarised in tables.

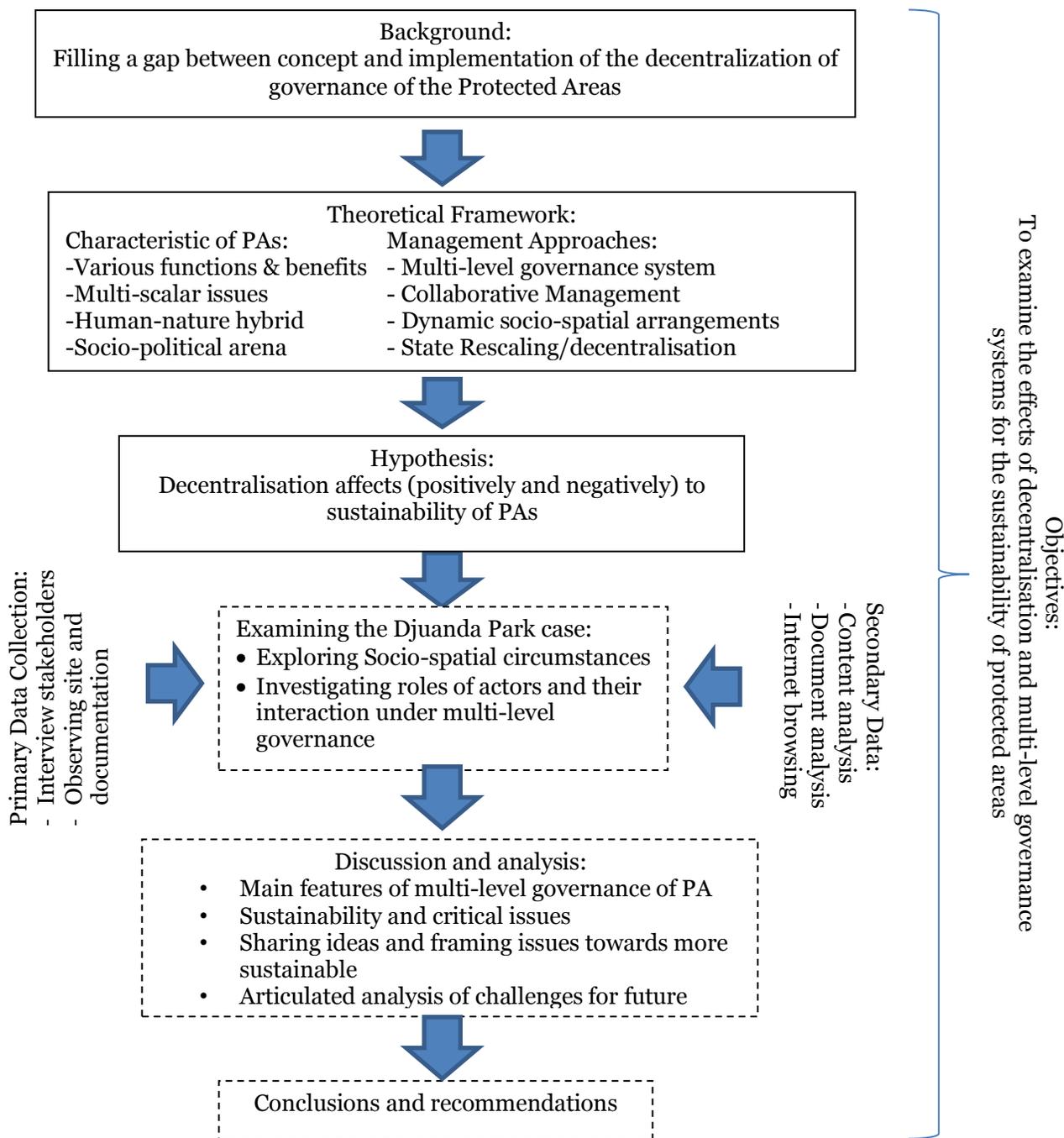
Chapter 4 Transformation Path of the Djuanda Park Governance

This chapter explores mechanisms and characteristics decentralisation currently happening in the Djuanda Park. Discussion focuses on the management performance in the Djuanda Park including potentials and drawbacks under decentralisation.

Chapter 5 Conclusions and Recommendations

This chapter gives a summary of the thesis and more precisely answers the research questions based on the results of the study case. Analysis in order to raised applied knowledge for park's managers and others the thesis provides a set of policy recommendations.

Figure 1 Research Design of the Thesis



Source: author

CHAPTER 2

THEORETICAL REVIEW

2.1 Introduction

Studies on governance as a vehicle in the direction of sustainable development found an interesting contemporary debate within social-research counted out by academics, practitioners, planners and policy makers. Governance is seen as “*the fundamental engine of the sustainability system*” rather than previously considered as the fourth pillar of sustainable development (Parra, 2013: p145). Governance entails power and authority that are exercised at various scales of institutions within the planning arena. It recently has shifted from old types towards the renewal ones. The environmental governance system is characterised by bringing non-state actors into policymaking process, which has underpinned the renewal of the current governance system (Jänicke & Jorgens, 2006). Meanwhile within a frame of multi-level governance, there are two directions to communicate environmental policies: first, from state to the private sectors or public horizontally, and second vertically to global institutions and to lower level of governments (decentralisation) (Lemos & Agrawal, 2006). As a result, multi-level governance requires an integrated approach (horizontal and vertical) to deal with complexity for environmental policymaking (Lafferty & Hovden, 2003) and in particular to achieve the sustainability of protected areas (PAs) (Parra, 2010).

Redefining the concept of governance in PAs can be attained by reviewing its guidelines (Lockwood, 2010), understanding its vicissitudes (Parra, 2012) and reworking its designation based on human-nature relationship (Zimmerer, 2000). A multi-level of governance system characterised by multi actors, multi perspective and multi manifestation to deal with challenges from global and local has created a state rescaling dynamic (up scaling and downscaling) in the protected area designation (Parra, 2010). Thus, making sense of decentralisation (downscaling) is urgent as a tool to redistribute power over natural resources management (Larson &

Soto, 2008), getting policy making to be closer to those affected people (Lemos & Agrawal, 2006) and to stimulate a social innovation as a fuel to generate socio-spatial sustainability (Parra, 2013).

This chapter is structured in five sections. Section 2.2 emphasises that renewal governance system is needed for a better environmental policy. Section 2.3 focuses on multi-level governance and current protected areas designation. Section 2.4 provides an insight for governance and decentralisation towards a better pathway. Moreover, section 2.5 explores theories related to multi-level governance challenges to deal with buffer zone of protected areas.

2.2 The Renewal of the Governance System Within Environmental Policy

“Governance means the action or manner of governing a state, organisation and it is different with management which is defined as the process of dealing with or controlling things or people” (Oxforddictionaries, 2013). Literally, governance is more concerned on how to guide, to steer and to direct society within a country. It requires not only an appropriate knowledge of governing but also an art, communication skills, attitude and wisdom that eventually creates a collective action to achieve a sustainable civil society. Parra (2013) has emphasised that governance function is as not only a “shadow pillar” of sustainable development triad but also “as an *engine that fundamentally generates the sustainability system*”. Hence, governance has the ability in aiming society into the gate of sustainability through enabling all resources of economics, ecology and social dimensions.

Since definitions and complex issues emerge when discussing environmental policy, it seems that there is a need for a renewed governance system where the state and non-state actors play a role in policy discussion (Jordan, 2008). Discourse of governance was raised due to an insufficient functioning of the government, as one and the only institution governing society. Shifting in governing from government paradigm to governance emphasised the importance of institutions that live outside

the government house in decision-making process. By doing so, a collaborative action becomes its core where power and authorities are exercised in a fair mode and discourse is voiced not in overtone. Balance in acting, sharing knowledge, responsibilities and inclusiveness of planning arena are the characteristics of governance system (Healey, 2006). It calls for a broader society to be involved into a decision-making process and implementation of these decisions.

Why environmental issues? The understanding of the environment is borderless, cross-sector and complex. It attracts not only environmentalists to deal with its challenges but also social observers, biologists, economists, customary communities, civil society as well as politicians. It also calls for private sectors, industries, corporation and non-governmental organisations to play their role into environmental policymaking arena. It has a wide range of spatial spectrum from global, supra national, national and local bodies of governance levels. It is complex since it varies from water pollution; biodiversity degradation, air pollution, hurricanes and other types of catastrophic that are done for either natural or human-made. Thus, a renewal environmental governance system is urgent and needs extraordinary efforts with various types of means by multiple actors. In covering those issues, governance reincarnates to be a light in the dark, a pathway for people to deal with abstract notions of sustainable development. Question then, how to manage or to deal with the shift from government to governance? And who should lead this process?

Currently, challenges in dealing with environmental issues are not only speaking about spatial context but also social term and it needs governance ideas to translate the relation between the two. Indeed, the role of the state in environmental policy design is still important however, regional or local states perspectives should support it. *Though they are still predominate, traditional forms of hierarchical intervention are increasingly being supplemented by new forms of cooperative governance* (Jänicke & Jörgens 2006, P.168). Thus, interaction between local-regional and state

in designing policy for steering community is essential in order to avoid mismatch and societies' reluctance. Larson & Soto (2008) have successfully depicted stories of the fallen centralistic-based approach over natural resources governance that tempestuous happened in Asia, Africa and Latin America in the last decades. Despite those regions, have their own stories based on their specific contexts and socio-spatial characteristics, similar pathways seemed to be made: transferring of power from central government to lower level governments and those affected community as well. Study of governance has spawned some new terms in order to discover a new pathway for achieving sustainability.

Some scholars proposed the term “good governance” refer to the public policy transformation that requires openness, accountability, participation and effectiveness on its process, by taking civil society and non-governmental organisation reform



Figure 2. Good governance and its Characteristics
Source: (UNESCAP 2013)

movements (Batterbury & Fernando, 2005). In exercising good governance, eight main emblematic items have been identified and related with decision making processes namely (figure 2): participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law (unescap.org, 2013). Figure 2 has shown that elements within good governance are connected. Despite those elements, in the context of protected areas, resilience becomes a part also of the good governance (Lockwood, 2010).

Another term of governance that currently is used is the so-called “adaptive governance”. Adaptive governance for social-ecological system, article written by

Folke, et al., (2005) that has been acknowledged as an important article for those who concern on adaptive governance. In the article there are two notable concepts : resilience and social ecological system (SES). Resilience has been translated “*as the capacity of system to absorb disturbance and reorganize while undergoing changes so as still retain essentially the same function, structure, identity and feedbacks*” (Folke et al., 2005, P.443). It means that towards adaptive governance we should enable our social, economic and ecological systems to be tough and robust. It is important to cope with any shocks or stresses either from external and internal of the SES. Meanwhile SES refers to *the integrated concept of human in nature and stress that the delianiation between social and ecological systems have powerful reciprocal feedbacks and act as complex adaptive system* (Folke et al. 2005, P.443).

Thus, a dynamic change of societal system attracts also the change of ecological system where the society takes place. Between the two is interelatted, connected and nested through which adaptive governance are exercised. Adaptive governance of ecosystem calls *polycentric institutional arrangements which are nested quasi-autonomous decision –making units operating at multiple scales* (Folke et al. 2005, P.449). Polycentric institutional arrangements currently becomes a notion to deal with multi-scalar issues in environmental policy making. It calls also the meaning of multi-level governance system.

2.3 Multi-level Governance and Complexity in Governing Protected Areas

Multi-level governance is a term refers to various types of governance systems that have to be involved in dealing with environmental issues as opposed to a centralistic-system approach. *The state is losing its steering ability as control is displaced: upwards to regional and international organisations such as the EU; downwards to regions and devolved localities; and outwards to international corporations, non-governmental organisations and other private or quasi-private bodies*” (Jordan et al. 2005, P.480). For instance, in Europe, many (environmental) policies made by state

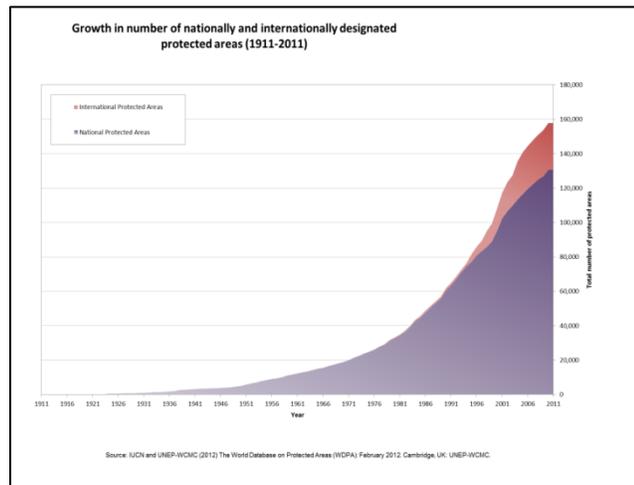
are a result of socio-institutional arrangements that is affected by both global governance system e.g European Union (EU) or regional/ local governance system and private sectors as well.

Meanwhile, interaction of various levels of governance systems within protected areas has triggered a complexity in governing protected areas since different perspectives are at stake. “*Sectors in society are not governed on one level or on a number of separate levels, but through interaction between these levels*” (Bressers & Kuks 2003, p.1). In addition, protected area designations are currently affected also by interaction of multi-scalar articulations determined by global, national and local level of governance (Zimmerer, et al. 2004 and Parra, 2010). Thus, to design models for protected area governance many considerations should be made, precautionary principles should be raised and social aspects should be taken into consideration. Environmental policies made by the state or any government level should always be accessible by public and adversely public also has the ability to criticize. In this case, a synergy between government agency and public in environmental policy making could be done and generates a process to renew governance systems.

International Union for Conservation Nature (IUCN) has offered the term of protected area. Despite term of protected areas can be context dependent, most people agree that protected areas established for conservation goals. In respect with, this thesis uses the term for protected area coined by the IUCN: “*A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values* (Dudley 2008, P. 8-9). Based on this, a piece of space can be said as a protected area where all socio-spatial arrangements are confirmed to designate it for the ideals of conservation.

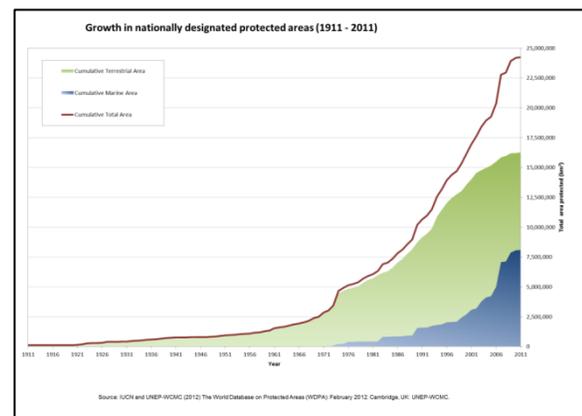
The establishment of Yellowstone National Park in USA in 1872 is seen as the departing point to trace a historical trajectory of the notion of the protected areas. (Brockington, et al., 2008). The evolution of protected areas management has been

recorded by IUCN through classifying them into ten categories. These categories are built in the direction of the big growth of protected areas designation around the globe including nature reserves, wilderness areas, national park, national monument and so forth



(please see the articles of Nature Unbound by Brockington, et al.; 2008 and Guidelines for Applying Protected Areas Management by Dudley; 2008). As shown in the figure 3, the World Database of Protected Areas (wdpa.org) has released the global growth of protected areas since 1911 to 2011.

Figure 3 shows how between 1981 to 2006 the number of PAs designation have increased considerably, before it remained constant in the early 2010. In addition, during the same periods, the number of internationally cross-border protected areas (red line) showed a similar pattern. International protected areas in this case are transboundaries protected areas that regionally across different countries e.g Betung Kerihun National Park (Indonesia) as transfrontier reserve with the Lanjak Entimau Sanctuary



(Indonesia) as transfrontier reserve with the Lanjak Entimau Sanctuary Area (Malaysia). Meanwhile as portrayed in figure 4 showed in the early 1990s to 2011, there has been a steeply increased in the total acumulative number of protected areas' size for both marine and terrestrial. During one decade the global

Figure 4. The Growth in Global Extent of Protected Areas (km²)
Source: (WDPA.org 2013)

surface covered by PAs jumped from around 2,5 millions km² to more than 22, 5 millions km².

In addition, Zimmerer et al. (2004) showed how globalisation affects significantly the shift of the direction of the current management style of protected areas. In this case, the establishment of PA mainly done by the intense work of international non-governmental organisations (NGOs) for example World Wildlife Fund for Nature and Natural Resources (WWF), IUCN, Conservancy International (CI), the Nature Conservancy (TNC) and others. Those NGO's play an important role in current PA designation and somewhat has been admitted as an entrepreneur policy making in sounding conservation into the world. For instance, orang-utan, (*Pongo pygmaeus*) preservation programme in Gunung Leuser National Park (GLNP) in Indonesia can be done through initiative of Conservation International (CI) and KEHATI (local NGO) to encourage the US and Indonesia government signed the programme (Bethari, 2013). Besides that, some national parks in Indonesia were established as an initiative from WWF namely Betung Kerihun National Park and Kayan Mentarang National Park in Borneo Island (Ministry of Forestry, 2013).

The engagement of players outside the nation-state in governing protected areas calls for a new type of governance system that has created a room for collaborative approach. Thus, in protected areas governance, the challenges are about not only biophysics, economics and social impacts of establishment of PAs but also the question who are the leaders in decision-making process for which authority and power should be transferred and exercised. It leads to the notion of multi-level governance system, which emphasizes power and responsibilities to bring PAs towards sustainability should be shared into a polycentric approach.

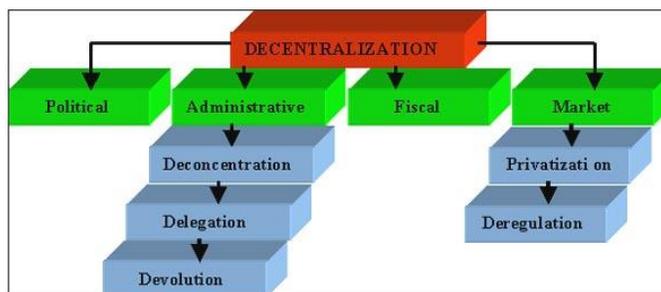
Meanwhile, within intersection of multi-level governance system, the role of private sectors for future development of protected areas is important to disclose. As Brockington et al., (2008) argue that, between conservation and capitalism are two coin sided pattern of future global direction of protected areas. It is marked by the rise

of conservation-based NGOs, international agreements and conventions of conservation, the emergence of community and market-based conservation programmes and tourism. However, those characteristics of current PAs designation are not eliminated the core mission of PA but transformed the direction towards them. *“Market based transferability; mobility, standardization, and flexibility of natural features are emblematic of recent conservation geographies. Simultaneously the qualities of environmental embeddedness are not vanishing but rather are being reworked by these new conservation geographies (Zimmerer 2004, P.357).* IUCN, WWF CI and other global NGOs has intensively vocalized the meaning of conservation as well as played their roles in shaping a future aim of current PAs beyond national and even supranational boundaries. Discourse currently rose focused on how to deal with various governance systems which present a fairly discussion arena for all players exercising their power, involving their opinion without any over tune voice from a certain actor in protected areas issues.

Many options can be exercised and many approaches can apply with issues of protected areas governance via multidisciplinary approaches (Affolderbach & Parra, 2012). Multidisciplinary approach generates which path that should be taken towards sustainability. Protected areas are not only talking about space context, biodiversity, endangered species, river basin or indigenous people. These areas are high in vulnerable to human disturbances and the consequences of mismanaged PAs are huge and impossible to predict. Yet, we may start from the field where a wide range of institutions, bodies and agencies with different backgrounds, disciplines and knowledge are attempted to orchestrate their roles and to enable these areas towards a better performance. It takes us into a mode of governance which named decentralisation. State rescaling is a new term in the direction of current global protected areas governance to deal with a dynamic socio-spatial arrangement processes (Parra, 2010). In respect with, the thesis uses this term to describe decentralisation of protected areas governance in this study.

2.4 Decentralisation of Protected Areas: An Overview

Decentralisation is simply defined as *a shifting process of power and responsibilities from central government to lower level of governments (local government, communities or private sectors) with subsidiarity*



principle where decision making is done either by

Figure 5 Forms of Decentralization
Source: FAO, 2013

affected communities or their representative authorities as its underlying drivers (FAO, 2013). There are several forms of decentralisation namely political, administrative, market and fiscal (Figure 5). Explanation of the differences among those forms is well explained by FAO as shown in the table below.

Forms of Decentralisation	Definition
Political	<i>Associated with increased power of citizens and their representatives in public decision-making. It generally involves a representative political system based on local electoral jurisdictions and pluralistic parties.</i>
Administrative	<i>the transfer of responsibility for planning, financing, and managing certain public functions from the central government and its agencies to field units of government agencies, subordinate units or levels of government, semi-autonomous public authorities or corporations, or area-wide, regional, or functional authorities. In turn, administrative decentralization may take the following forms:</i> <i>(i) Deconcentration, which consists of redistribution of decision-making authority and financial and management responsibilities among different levels of the central government. This form is</i>

	<p><i>often considered the weakest form of decentralization;</i></p> <p><i>(ii) Delegation: through delegation central governments transfer responsibility for decision-making and administration of public functions to semi-autonomous organizations not wholly controlled by the central government, but ultimately accountable to it (e.g. sub-national housing authorities, transportation authorities, regional development corporations);</i></p> <p><i>(iii) Devolution: in a devolved system, local governments have clear and legally recognized geographical boundaries over which they exercise authority and within which they perform public functions (e.g. raising revenues, investment decisions). It is this type of administrative decentralization that underlies most political decentralization.</i></p>
Fiscal	<p><i>Associated with the authority of the decentralized units to make expenditure decisions with funds either raised locally (e.g. user charges, co-financing with users, property taxes, borrowing, etc.) or transferred from the central government. In many developing countries local governments or administrative units possess the legal authority to impose taxes, but often the tax base is not sufficient to undertake local investments, so that they rely heavily on government transfers.</i></p>
Market	<p><i>The most decentralized form in as much as decision-making power is transferred from public to private organizations. It can take two different forms:</i></p> <p><i>(i) privatization which means allowing private enterprises to perform functions that had previously been monopolized by government, or contracting out the provision or management of public services or facilities to commercial enterprises, or still</i></p>

	<p><i>financing public sector programmes through the capital market and allowing private organizations to participate; and</i></p> <p><i>(ii) deregulation which consists of transferring services provision or production activities previously owned or regulated by the public sector to competing private organizations (e.g. electricity or broadcasting provided by various and competing companies).</i></p>
--	---

Table 1. Forms of Decentralization and its Definitions, Source: (FAO, 2013)

The table 1, shows that decentralisation is not only about transfer some authorities that previously was dominated by central but also political support, finance, administrative and market to lower level government. Implementations of those forms of decentralisation may vary among countries. Some countries tend to use deconcentration as their decentralisation while others use devolution and so forth depends on political processes. Dubois & Fattore (2009) argued that definition of decentralisation can be distinguished by looking at three components: dynamic emphasis whether decentralisation as a process to reform public administration or decentralisation as a structure, content of authority (what kind of power, what responsibilities that are to be decentralised) and who receive the power whether local government or periphery units, autonomous entity or etc. These components are able to define decentralisation process that happened in certain country and also to examine its consequences to transformation in public policy making.

Decentralisation over natural resources governance has noticeably to be considered as a new path towards improved governance system since in the mid-1980s with two trends in politics (Larson & Soto, 2008): first, political shifts in some developing countries created autonomous elected local government with high bargaining power within decision-making process. Second, a paradigm shift in seeing communities as an important key player into planning arena given the magnitude of environmental challenges. Thus, decentralisation over natural resources governance has raised

position of local leaders and other types of local environmental agencies either the state or non-states into discussion and implementing environmental policies. In the context of polycentric modes of governance, decentralisation should not weaken the central government functions, instead to redistribute the power and responsibilities among multi-level governance systems over natural resource management.

Local perspectives are useful to detect local perturbations. Such elements of *direct participation, participatory democracy, pluralism and rights* are a new consideration for current decentralisation that distinguishes from how decentralisation happened in the past (Larson & Soto, 2008). The question is which is the urgency of decentralisation of natural resources governance? Decentralisation has some benefits: *it can produce greater efficiencies because of competition among subnational units; it can bring decision making closer to those affected by governance, thereby promoting higher participation and accountability; and finally, it can help decision makers take advantage of more precise time- and place-specific knowledge about natural resources* (Lemos & Agrawal, 2006). Regarding those advantages, decentralisation policies within protected areas governance are expected to invite participation especially in local and increased accountability. Accountability is perceived *as the exercise of counter power to balance arbitrary action, manifested in the ability to sanction* (Larson & Soto 2008, P.217). The accountability requires check and balances, and also a punishment for those who against the rule of games within decision making arena. Meanwhile, Pimbert & Pretty (1995) proposed a typology of degrees of participation from the passive to mobilised participation as shown in the table 2. Based on the table, recognising components of each type of participation requires extraordinary efforts to shift the degree of participation. At the beginning people need a guidance to express their aspirations, initiatives and thinking. Indeed, the role of NGOs is very important in this case before they really become self-organised communities.

<i>Typology</i>	<i>Components of Each Type</i>
<i>Passive</i>	<i>People participate by being told what is going to happen or has already happened. It</i>

<i>Participation</i>	<i>is unilateral announcement by an administration or project management without any listening to people's responses. The information being shared belongs only to external professionals.</i>
<i>Participation in Information Giving</i>	<i>People participate by answering questions posed by extractive researchers and project managers using questionnaire surveys or similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research or project design are neither shared nor checked for accuracy.</i>
<i>Participation by Consultation</i>	<i>People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making and professionals are under no obligation to take on board peoples' views.</i>
<i>Participation for Material Incentives</i>	<i>People participate by providing resources, for example labour, in return for food, cash or other material incentives. Much in-situ research and bio prospecting falls in this category, as rural people provide the fields but are not involved in the experimentation or the process of learning. It is very common to see this called participation, yet people have no stake in prolonging activities when the incentives end.</i>
<i>Functional Participation</i>	<i>People participate by forming groups to meet predetermined objectives related to the project, which can involve the development or promotion of externally initiated social organization. Such involvement does not tend to be at early stages of project cycles or planning, but rather after major decisions have been made. These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.</i>
<i>Interactive Participation</i>	<i>People participate in joint analysis, which leads to action plans and the formation of new local groups or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple perspectives and make use of systematic and structured learning processes. These groups take control over local decisions, and so people have a stake in maintaining structures or practices.</i>
<i>Self-Mobilization</i>	<i>People participate by taking initiatives independent of external institutions to change systems. Such self-initiated mobilization and collective action may or may not challenge existing inequitable distributions of wealth and power.</i>

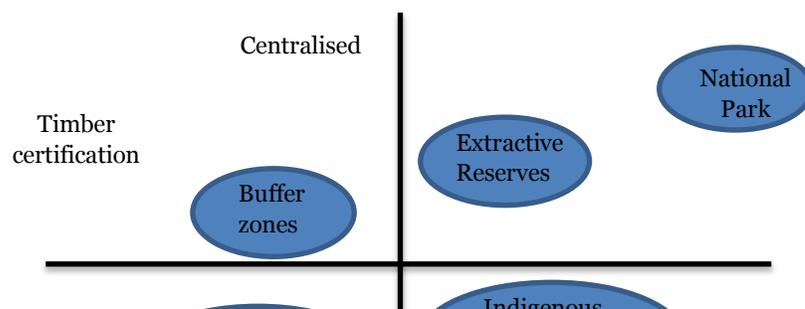
Table 2. The Typology of Degree of Participation, Source: Pretty (1994) in Pimbert & Pretty, 1995

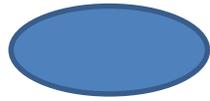
Downscaling a governance system promises a new insight about how a dynamic political circumstance has affected the transformation process and yielded an evolution story on territorial classified as protected areas (Parra, 2010). Parra (2010) argued that protected areas have been transformed in the context of socio-politics. In Morvan Regional Park in Burgundy, France, the park has become a struggling arena for politician in order to gain more interest from voter through which they could become a mayor. Thus, protected areas that associated with environmental values are perceived as an interesting theme to be raised into political discourse since it attracts many people, determining financial allocation both from supranational or national into governance systems.

Experiences of decentralisation over natural resource governance produce different results and it is may vary among countries. Some countries benefited of decentralisation by increased public participation, and acknowledged the role of local governance system. For instance, increased participation after decentralisation could improve spatial quality as occurred in Wu-Wei Keng natural reserve in Taiwan (Lu, et al., 2005). Due to realising high land degradation that could threaten Wu-Wei Keng Waterfall sustainability, some communities initiated a rehabilitation of the site. This effort has encouraged central government to adopt the mechanism for other conservation areas. Another empirical finding of “good” decentralisation process of protected area comes from the Philippines where decentralisation could share the burdens of central government in managing the area (Abbass, 2004). The government was aware that sustainability in protected area could be achieved through local empowerment and synergy among various levels of governance systems rather than relying on central-based policy. In the case of Indonesia, decentralisation over protected areas has promise in reforming public policy making through co-management by acknowledging the role of local and their contributions within management process in Bunaken National park (Hollenbach, 2005). These examples emphasizes that decentralisation requires co-management at multi-level governance systems in sharing authorities and responsibilities over protected areas.

Meanwhile, decentralisation is not always concretely perfect. Cases from developing countries in Asia, Africa and Latin America show difficulties to implement decentralisation policy over natural resources. In Uganda, local governments are seen to exploit timber within forest areas to pursue numerous revenue for financing development for their regions and less attention for conservation (Harttera & Ryan, 2010). In Brazil, decentralised PAs governance creates local government characterised by insufficient of political support, financial and institutional for PAs (Oliveira, 2002). In Indonesia, decentralised forest sector increased social tension between local and national in exercising power (McCarthy, 2001). Impacts of massive logging activities after decentralisation over forest sector in Indonesia not only threaten areas that have been allocated for timber production but also to the protected areas that have borderline to them (Resosudarmo, 2010).

As seen in the figure 6, Burgerhoff Mulder and Coppolillo (2005) have portrayed a typology of current conservation practices of protected areas. This chart shows that indigenous protected areas and private protected areas are the result of socio-institutional arrangements in the frame of decentralisation over protected areas governance. Nevertheless, national park is dominantly governed via centralised-based since the park ultimately belongs to the extreme spectrum of preservation purposes. Despite decentralisation of protected areas governance is remained debatable, this notion express that local community may have expertise in defining local-based problems (localities issues) exercising through their experiences and knowledge. Yet enabling local governance is necessary, there are two constraints in doing decentralisation: local willingness and local ability (Zuidema, 2011). Do the local governance is able to exercise power and authority from state over natural resource towards sustainability that involved such a complexity issues inside? Is there any support from the state in guiding and enabling local governance?





Preservation

Use

Decentralised

Figure 6. Type of conservation in practice
Source: Borgerhoff Mulder and Coppolillo (2005) in Brockington, et al.,(2008)

Local needs support from nation-state or global directives (upscale) to define appropriate guidelines since financial and broaden networks are located in them. Based on a study comparing decentralisation policy in three different countries (Pakistan, Indonesia and the Philippines) a successful decentralisation for sustainable PAs several factors were identified (Guess 2005, P.229):

- 1. A broad supervisory institutional structure*
- 2. Substantial international inputs into the development of the legal and regulatory framework*
- 3. Innovative capacity-building exercises and institutions*
- 4. Strong interest on monitoring and evaluation of devolution program,*
- 5. Provision of sufficient local fiscal autonomy*
- 6. Efforts to streamline local government operations*
- 7. Efforts to replace input budgeting and legal management systems driven by performance incentives and targets.*

2.5 Buffer Zones of Protected Areas

Protected areas governance is expected to enable various types of governance scales to deal with complexity of PAs characteristics. In terms of geography PA is generally divided into several terms of zonation namely the core, utilisation and buffer zones. However, it depends of the state to determine which area

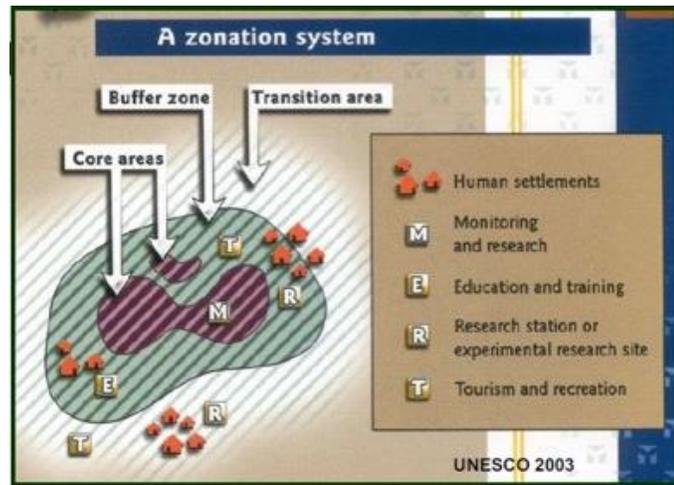


Figure 7. Zoning Areas of Waterton Biosphere Reserve, Canada Source: (Boden & Ledingham, 2013)

is categorised as core, utilisation or buffer zone respectively. The core zone is the primary areas for conservation and preservation that embrace strict regulations as well as less human disturbances. Usually this zone is take place within the heart of PA, which has valuable meaning of a symbol of the PAs. Utilisation zones are functioning to accommodate tourism, ecotourism that enable people to enjoy the intrinsic values of PAs. Lastly, the buffer zone that located in the border or outside of PAs boundaries that has the function to maintain some socio-cultural activities for those who lived nearby to the PAs (Dudley, 2008).

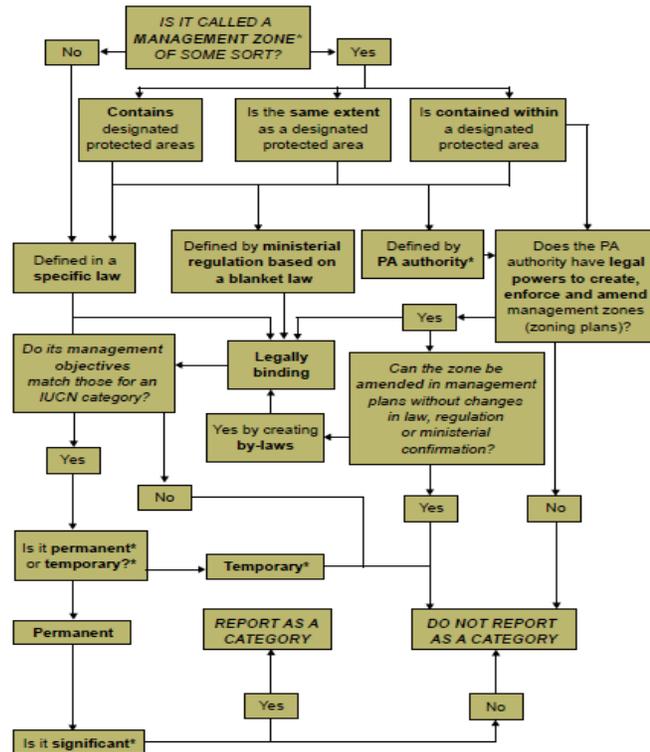
Nevertheless, some countries have different methods to plan and design PAs. For instance, in the Figure 7 we can see the zonation system in Waterton Biosphere Reserve in Canada. Established in 1979 as UNESCO heritage, the area has three different zones: *a legally protected core area; an adjacent buffer zone with activities that are compatible with conservation objectives; and a transition zone or 'area of cooperation' where sustainable land use is practised* (Boden & Ledingham, 2013). The core areas are Waterton Lakes National Park (505 km²). The Buffer zone is near to the residential and exactly intersects with borderline that is not strictly regulation of utilisation compared with the core zone. Transition area (white colour) is the outermost that mixed with residential and other types of various spatial purposes that

less strict in terms of conservation. “Buffer zones, biological corridors etc. may or may not also be protected areas (and thus eligible for a category) depending on the form of management and recognition by the state” (Dudley, 2008: p37). IUCN has

proposed guidelines in designing zones within protected area as described in figure 8. If we look at the direction line, one noticeable aspect is legally binding in determining zonation of protected areas. Legal binding is done whether law or ministerial decree decides it or PA authorities through which management action will depart.

Legal certainty of the existence of buffer zones is essential. In the frame of multi-level governance, buffer zone of PAs and requires cooperative among different level of governance systems. Analogically buffer zone in the

neighbourhood can be seen as a hedge before entering the core and distinguish a certain space from others. UNESCO of World Heritage Centre (2008) has defined buffer zone as “an area surrounding the nominated property which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the property. This should include the immediate



Protected area authority – Ministerial department, agency, NGO or community institution that is recognised in law
 Permanent – inscribed in law, established and recognised, subject to a long-term vision (e.g., core zone for key breeding species)
 Temporary – established for management purposes only, temporal (e.g., for a limited period)
 Significant – of a recognisable and reasonable scale and/or proportion to the wider landscape

Figure 8. IUCN Zoning Categorisation of Protected Areas
 Source: (Dudley, 2008)

setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection” (Martin & Piatti, 2009). The buffer zone is seen as a place where multi-level governance clearly plays their roles within PAs governance. Exploring buffer zone in the frame of multi-level governance of protected areas could become an important issue. This zone enabling the triad pillars of sustainable development to be more grounded within PA governance examination.

2.5 Conclusion

Governance has been acknowledged as the driver towards sustainable development. Examining multi-level governance of protected areas gives a new insight for a better understanding towards its sustainability. Current governance challenges are create for the complexity and uncertainty of SES. It calls for cooperation of various governance levels to deal with complexity of PAs. One of the governance transformations is decentralisation. Decentralisation as one tool towards effective protected areas governance has flourished as a characteristic, and thus has affected governance transformations in many countries. Despite the result of implementation decentralisation over natural resources vary among countries, decentralisation promises to create a better decision-making arena including protected areas. Examining a multi-level governance and effective decentralisation are urgent to endorse improved accountability and mutual participation from local. Community participation and accountability issues are two challenges for which PAs governance should be decentralised into those affected communities. In addition, buffer zone of PAs seems as the appropriate areas in observing effective decentralisation of PAs governance since it is established to address park-people relationship. Next chapter emphasises an analysis to address the research question via examining current decentralisation of protected areas governance in the case of the Djuanda Park.

CHAPTER 3

EMPIRICAL TOOLS FOR DATA COLLECTION AND ANALYSIS

3.1 Introduction

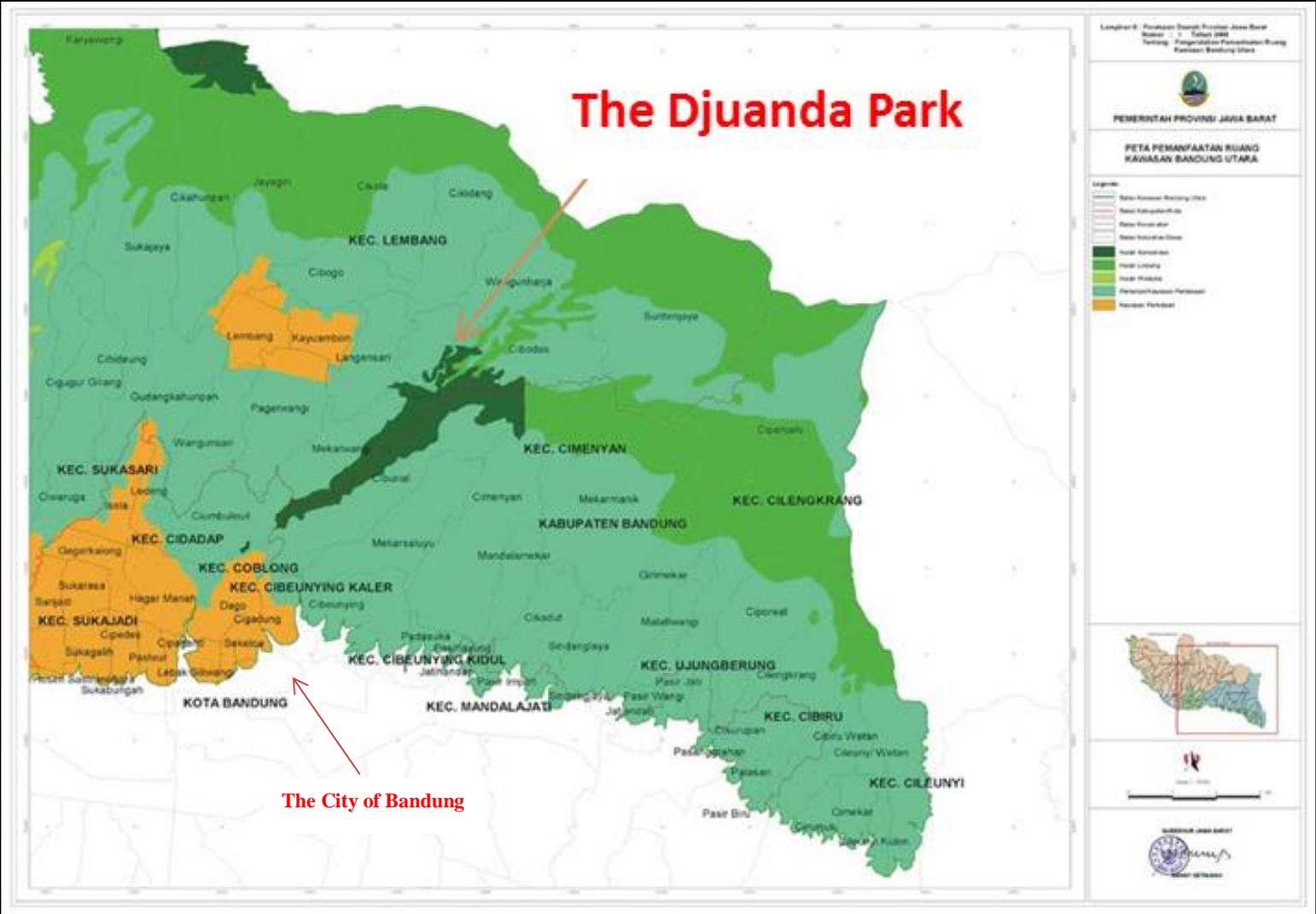
This chapter is aimed to connect the theoretical chapter of this thesis and the results. The analysis mainly focuses on exploring interactions among actors, exercising their roles and type of cooperation (collaboration, mutual benefits or conflicts) represented via argumentation of the existing of protected area. In order to avoid conflict of interests during research and gaining a more neutral perspective to pursue objectivity, thus, I positioned myself as an observer instead as a part of the actor. System in order to attain the data, some interview series were done by involving 9 privileged stakeholders that are involved in actions at different scales of governance. Analysis focused on the reasons of the Djuanda Park as case study, tracing historical trajectory of the Djuanda Park (path dependency). In addressing research questions, analyses of empirical case were taken through adopted working of Parra (2010). Some research findings therefore were displayed in narrative approach of social research.

This chapter is divided in five sections. Section 3.2 is about an overview of case study area that is essential to gain study interest and uniqueness values. Section 3.3 explains a brief history of the establishment of the area. Section 3.4 is focused on methodology of data collection as well as framework for empirical analysis.

3.2 The Djuanda Park and The North Bandung Area: A Brief Overview

The Djuanda Park is one of the natural reserve sites which was officially decentralised in Indonesia by the Ministry of Forestry (letter No 107/kpts/Menhut-II/2003), however the guidelines and regulations for governing the park are generally referred to Ministry of Forestry. Unlike other protected areas that are generally located in the

Figure. 9A Land-Use Map of the Djuanda Park and North Bandung Areas (Eastern Part), Source: KBU, 2013



remote area the Djuanda Park is located in the peri-urban area named the city of Bandung (figure 9). The park can be reached around 7 km to the north from the city centre. Due to the fact, people from the city of Bandung are usually coming and spending their leisure time within the park, therefore using it intensively. Besides that, the area has been recognised as important to improve air quality, public water supply, generating power and other environmental services for Bandung area (JabarProv, 2010).

In addition, as part of North Bandung Area (NBA), which has experienced complex social-cultural and socio-economic circumstances happened in the last decades (post-decentralisation era), pressures to the park are relatively high. There are massive developments for residencies, leisure activities and agribusiness expansion over the surrounding areas of the park. *“Overall, conservation areas covering 38, 548 hectares in the hills north of Bandung City is dominated by the 350 permits allowing residential development, hotels, restaurants, etc. issued by the government of the city / district. In fact, West Java Provincial Government has not yet issued recommendations for the consent requirement (Kompas, 2012).* If this massive development perceived as business as usual then it threatens the area for the future. In addition, the Djuanda Park and the NBA supplied water for people who lived in Bandung via Cikapundung River. It stretched along 15 km and 8 meters width with the rate of water flow (water discharge) is counted about 3000m³/second. Cikapundung River is a tributary of Citarum River that has upstream in Bukit Tunggul Mountain and downstream to North coast of Java (Bekasi regency) (JabarProv, 2010).

3.3 The Development of the Djuanda Park

In brief, establishment of the area started when Dutch East Indies (colonialism era) ruled in Indonesia. In the year 1922, via Bosche Wezen, Pulosari a protected forest, had essential meaning for Bandung area. After Indonesia gained independence from Dutch, the initiative to create a protected area was led byn governor of West Java (Mr. Mashudi) who designated Pulosari as a forest reserve area in 1960. Three years after,

the Djuanda Park was designated as the Botanical Garden similar to the Bogor Botanical Garden (BBG) structure. Some endemic plants and crops of BBG were taken to the Djuanda Park (ex-situ conservation). The idea behind was the Djuanda Park would become a recreation area for people living in Bandung.

Due to the area was chosen for recreational purpose, at that time, many visitors came to enjoy and spend leisure time during the weekend. Maribaya water flow was one of the most favourite tourist destinations especially in public holiday in 1970s. Realising its potential market and improving the area in 1978, Perum Perhutani (Forestry-state owned enterprise) took over the management of the Djuanda Park. This moment was recognised as the era of privatisation of natural reserves management in Indonesia. Following this, in 1980 the nation-state retook-over the management via the Natural Conservation Resource Agency of West Java region. The boundary of the area was redefined (590 hectares) and enhanced with the adding of the Dago waterfall which is located within the City of Bandung administration.

Five years later, the Djuanda Botanical Garden was re-named as the Djuanda Grand Forest Park. It is the first grand forest park in Indonesia, and Perum Perhutani designated as the manager of the area under the Directorate General Forest protection and Nature Conservation (nation-state agency). Finally, after long considerations and political bargaining during the decentralisation periods, the central state announced that the management of the park was going to be decentralised to lower level government degrees (provinces) in 2003. Central government officially acknowledged this event, remarkably noted as the first decentralisation of the protected area in Indonesia. Indeed, general regulation in management still relies on central guidelines; provincial government becomes the main actor in generating development of the area. The regulation government No. 25 year 2000 about region autonomy explicitly stated: if the area lies across different municipalities or administrative systems, the provincial government will be the main actor for the management of the area in order to reduce conflict of interest. Table 3 shows the history of the establishment of the Djuanda Park from Dutch colonialism to the decentralisation era.

Table 3 The Establishment of the Djuanda Park (Source: JabarProv, 2010)

No	Year	Historical Events
1.	1922	Part of Pulosari protected forest area designated by Dutch East-Indies (Bosche Wezen)
2.	1960	Initial attempt to create Pulosari Forest Reserve Area, pioneered by Mr. Mashudi (Governor of West Java)
3.	1963	The name of the area changed to “The Recreation Great Garden” Ir. H Djuanda” and the name was to honour Mr. Djuanda for his merits. During this year this area was planted with endemic crops originally from Bogor Botanical Garden.
5.	1978	Perum Perhutani (Forest state owned company) assumes the management of the park.
6.	1980	The management was handed over from Perum Perhutani to the Directorate General of PHPA cq KSDA Station III together with Curug Dago (waterfall), measuring 590 hectares.
7.	1985	Perum Perhutani re-took over the management of the park which guided by Ministry of Forestry
8.	2003	Concerning the Implementation Task Management The Djuanda Park by the Governor or Regent / Mayor, the management of the area submitted to the Government of West Java cq. The Djuanda Park Office Bureau under Forestry Agency of West Java

3.4 Methodology for Gathering Data

Multi-level governance term used in this study has aim to address multi-scalar issues within the Djuanda Park. A wide range of institutions, communities with different backgrounds and values were interviewed for gaining multiple perspectives in regarding the area. In order to gain trusts and create a convenient atmosphere during interview, the thesis process was explained in advance including the secrecy of the

participants. Recording during the interview process is also based on the agreement of participants, if they have no pleasure thus the statements were written through a notebook. All the interview process is as much as possible to follow ethics for conducting social research (Vanclay, et al., 2012).

Participants during interview are distinguished into state and non-state actors (table 4). For the former, actors are staff from Ministry of Forestry, Ministry of Domestic Affair and Ministry of Environment, Forestry Agency of Bandung Regency, Spatial Planning Agency of Bandung Municipality and park manager. Mainly questions are focuses on policy to decentralised, argumentation underlying decentralisation process, localities issues and sustainability concept through decentralisation process its impact to spatial quality of the area.

Table 4. Type of Participants during interview, Source: Author

Participants	Roles and Responsibilities	Main question themes
State Actors • National Level 1. Ministry of Forestry 2. Ministry of Environment 3. Ministry of Domestic Affair	Providing guidelines, setting general objectives, regulation and rules , financial support and monitoring and evaluation programs	Policies related to decentralise protected areas governance. Considerations before decentralisation, indicators and criteria of successful decentralisation, benefits and pitfalls of decentralisation
• Regional Level	Implementing and operationalizing regulations /policy, organizing strategy and setting specific goals, applying area development and improvement, centre for collaboration program, setting agenda for long and short term	

<ul style="list-style-type: none"> • Municipalities <ol style="list-style-type: none"> 1. Forestry Agency of the Bandung Regency 2. Spatial Planning Agency of the Bandung Municipality 	<p>Supporting area development program, actively involved within decision making, criticizing and contributing on policy making,</p>	
<p>Non-state Actors</p> <ul style="list-style-type: none"> • Academics 	<p>Centre knowledge and innovation, mutual benefits of public-education services, intermediary agent for conflict management, providing insights and a new approach of management</p>	<p>mainly pertaining to decentralisation and its (social) impacts, legal standing and regulation-based of decentralisation policy over PAs governance</p>
<ul style="list-style-type: none"> • Private sector <p>Electric company</p>	<p>Collaboration activities, centre for financial innovation and marketing management, education-based activities, sponsorships</p>	<p>contribution and their responsibilities toward a better management for private sectors including financial support and tourism-oriented program</p>
<ul style="list-style-type: none"> • Non-governmental organisation 	<p>Voluntary-oriented activities, centre for innovation and creativity, centre of critical thinking and environmental campaign, creating social empowerment program and local capacity building</p>	<p>For NGO questions is dominantly for social equality, socio-cultural embeddedness accommodated into policy and etc.</p>
<ul style="list-style-type: none"> • Local Community 	<p>Centre of social-culture embeddedness, preserving and maintaining spatial quality of the area, centre for social</p>	<p>Local actors focus on participation and impact of decentralisation into their</p>

	direct impact assessment, expertise of historical analysis, local knowledge and values of the area, nodes of social-nature interactions	daily life, the meaning of the Djuanda Park for them and so forth.
--	---	--

Actions of Non-state actors are intended to be more specifically explored given their contribution and share responsibilities in managing the park. This group includes of private companies (Electric Company), non-government organisations (Walhi Jabar), academics (IPB) and local communities (Ciburial villages). Focus of questions is mainly to decentralisation and its (social) impacts, legal standing and regulation-based for academics, contribution and their responsibilities toward a better management for private sectors including financial support and tourism-oriented program. For NGO questions addressed for social equality, socio-cultural embeddednes accommodated into policy etc. Local actors focus on participation and impact of decentralisation into their daily life, etc. (see appendix 2). Besides these interviews, planning documents such as strategic plans of the Djuanda Park, spatial planning documents provided by provincial and municipals related to the area were also being examined as well as previous researchers and news.

3.5 Framework for Data Analysis

There are four steps in analysing data. First, main features of multi-level governance system under PA notion should be identified. It is important to describe a various spatial scales system within the case study area including its actors, their institutions and strategies with different level of governance system. Second step is critical issues which determine sustainability within the Djuanda Park. The aims of this are to examine past experience through life history of the area as well as to present main current issues affecting the area. Third, sharing ideas among actors and framing main issues. The objective of research process is to explore interpretation of each actor in dealing with main issues based on their institutions background. And lastly step four is articulated analysis for future management. This step is aimed to seek an innovation

proposed by actors to achieve either short-term goals as well as long terms via strategic planning. A brief description of each step can be seen in table 5.

Table 5. Steps of Analysis Data*

Step	Objective
I. Main features of MLG system in PA management	To describe an overview of various spatial scales (actors, institutions and strategies) in the research (national, regions and municipalities)
II. Sustainability and critical issues within the Djuanda Park	To examine a path dependency via historical analysis and to present main environmental-social issues
III. Sharing ideas towards more sustainable	To explore multi-perspectives and notions under sustainability concept among actors in dealing with main issues
IV. Articulated analysis of challenges for future management	To investigate a new breakthrough in dealing with managerial issues (finance, property rights and spatial planning) and complex issues (water, land-use changes, overlapping regulations and autonomy)

***Adapted from Parra (2010)**

3.6 Conclusion

This chapter gave an insight the objectives and questions used for gathering data and confidential information. It is essential since the data that is used during study will determine what results look are like. Divided into five sections, the chapter mainly focused on mapping stakeholders and listing the questions that were discusses with the stakeholders. Besides that, the chapter also discusses on how the thesis is structured for gathering data and analysis based on the recording and statement of the participants. Next chapter will discuss about analysis and findings of the thesis.

CHAPTER 4

TRANSFORMATION PATH OF THE DJUANDA PARK GOVERNANCE

4.1 Introduction

The Djuanda Park only covers around 1.3 % of the total North Bandung Area (NBA) which has been labelled as a preservation area. The park contributes considerably to provide water from its rivers to generate power as well as to supply drinking water dedicated to people who lived in the city of Bandung. Decentralisation with multi-level governance system to some extent has improved the organisation and management of the park. It has “successfully” raised commitment from provincial government to be more concerned about conservation issues and to deal with complex socio-spatial relations. Besides that, the roles of non-state actors, as partners within the frame of the park co-management system is positively experienced by park managers.

Nevertheless, decentralised PA as occurred in the Djuanda has also brought some new challenges. First, the challenges are less of central-state guidance during transition periods of decentralisation. In this case the role of the central government are training for staff, building social-network across regions, financial planning for conservation, linking to the global conservation institutions and so forth. Second, such an unclear roles and responsibilities among stakeholders have produced less integrated policy over management of the park. Third is dealing with complexity issues over buffer zone area.

This chapter is the primary part of the thesis since it attempts to examine a theoretical framework by looking at empirical case via a certain methodology. Section 4.2 explains underlying laws of decentralisation policy for forest in Indonesia. Section 4.3 explores narratively the contemporary challenges for the management of the Djuanda Park. Section 4.4 mainly emphasises on current improvement and remained issues of the management of the Djuanda Park in Decentralisation Era.

4.2 Decentralisation of Forest Sector and Grand Forest Parks in Indonesia

4.2.1 Decentralisation of Forest Sector and PAs in Indonesia: an Overview

Indonesia has experienced a significant socio-political transition in the last decades. After the collapse of the Suharto regime in 1998, Indonesia entered a new phase in governance system. It is marked by a renewal of the profit sharing over natural resources that are more equitable between the centre and the regions. In terms of forest sector, the regions that are rich in forests demanded the right to manage production forests that were previously controlled by the centre (Resosudarmo, 2010). Some laws were created at that time including Basic Constitution 1945 that has been amended. In respond to the need of the regions, parliament via general assembly passed Law 22, year 1999 about regions autonomy. This law gives authorities to the districts to manage forests in the regions. Coordination within the framework of the Law 22 of 1999, the government also confirmed Law no 25 of 1999 on fiscal balance between the central and district levels. These laws have become a symbol of the emergence of decentralisation era in Indonesia and changed the position of the central and local within decision-making process over forest sectors. Under the Law 22, some districts are allowed to issue logging permits for forest-company that in the past fully controlled by central. In Indonesia, the new law effectively implemented the year after (2000). Yet, due to a less of comprehensive preparation and political pressure from autonomous regions have produced a multi-interpretation of each passage within the law (Resosudarmo, 2010). As a consequence many logging permits was issued at that time and dramatically changed land cover that is from primary forests to secondary forests (Obidzinski & Barr, 2003).

Meanwhile, at the same year, Law 41, 1999 about forestry was issued. This law strengthened the role of central government (Ministry of Forestry) to manage and organise forests including protected areas. Under the law, some forests and protected areas are fully controlled and organised by the Ministry of Forestry. This law seems contra productive with the spirit of decentralisation for forest sector and does not written about transfer policy over forests sector to local (Resosudarmo, 2010).

Conflict of interests between central government and forest-rich districts government is inevitable, between the two claimed that each has right to manage forests based on Law 41 and Law 22 (Yasmi, et al., 2005). Some research mainly from CIFOR (Centre for Forestry Research) showed the impacts of early decentralisation over forest sector in Indonesia. In this case, a severe land and biodiversity degradation occurred (Yasmi, et al., 2005), increased social tensions among local and central (Sudirman, 2005), threatened indigenous local existences (Tokede, et al., 2005) and others conflicts and mismanagement over forest sector which more emphasis on economic-driven policy than preservation (Barr, et al., 2001; McCarthy, 2001; Obidzinski & Barr, 2003; Yasmi et al., 2009). Threat of land degradation and loss biodiversity do not only occur in forest areas that are designated for timber production but also spread until it reaches the boundaries of the protected areas like National Parks (Resosudarmo, 2010). These examples show the negative impacts of decentralisation over forest sector in Indonesia.

However, in the positive side, decentralisation brings a new perspective mainly related to the role of local actors. In this case, local communities have been acknowledged as main stakeholder formally as well as they have a more access to gain benefits from forest resources (Resosudarmo 2010, P.118). In order to harmonise decentralisation policy and reduce its negative impacts to forest sustainability, central government issued a government regulation (PP) 25 , 2000. This regulation rules the power sharing among central, regions and districts over natural resource management including forest sector. Based on Law 22, decentralisation policy in Indonesia gives the authority mainly to the districts rather than provinces. The provinces are seen do not have any power and less involvement within forest sector management in autonomy era. PP 25 attempted to adress the issue. In this case, an area that take place across different districts border should be managed by the provinces in order to reduce conflict of interests. This PP aims to restore the role of province within decision making and give them an authority.

Besides that it aims to balance power among central, province and district in Indonesia especially in forest sector decentralisation.

In similar case, the positive impact of decentralisation is that local knowledge is seen has a better understanding to manage a forest area. Case from Bukit Barisan I Natural Reserve in West Sumatera, showed on how *Nagari* (local communities-village) has a better way to protect the area based on their local knowledge through co-management (Zachary, 2011). Co-management is seen as the appropriate way to reach the effectiveness of decentralisation upon protected areas in Indonesia. Co-management of protected areas in Indonesia require a multi-level decentralization (transfer power that ranging from central to district and or further to village level), the existence a local insitution, and incentives for the parties to participate (Yonariza & Shivakoti, 2008. P.156). The idea of multi-level decentralisation attempts to formulate the best way of decentralisation of protected areas that meet with spesific character and culture where the PAs are took place. For instance, in West Sumatera *Nagari* concept of decentralisation has improved the protection of Bukit Barisan I nature reserve from massive destrucution after decentralisation (Yonariza & Shivakoti, 2008). This means that in the case of Bukit Barisan I Nature Reserve, decentralisation is not only end in the district level but go further to village level.

Based on these, decentralisation policy in some extent enhance the protected areas management in Indonesia, however the drawbacks of the policy exceeds the advantages. In other words, current decentralisation should be reconstructed in order to minimize its negative impacts. Indeed, no government bodies neither central government nor local could handle and control protected areas management in Indonesia. All actors that lived at multi-level governance system should synergise and cooperate in order to create a better management. Each actor at multi-level governance system has their own role and among them are completed each others to conceptualise and to implement a better decentralisation for protected areas.

4.2.2 Grand Forest Park Governance in Decentralisation Era

Indonesia conceptually has attempted to organise the institution (Ministry of Forestry), set rules, and regulation in accordance with the sustainability principle. Forest in Indonesia should be managed and organised for economics (tangible benefits), environment (conservation) and social (empowerment). Organisation in Ministry of Forestry has been divided into several divisions namely Directorate General of Forest Protection and Nature Conservation (PHKA) aims to manage conservation areas including National Parks, Natural Reserves and previously Grand Forest Parks, Directorate General of Forestry Enterprises (BUK) for forest production and timber management and Directorate General Land Rehabilitation and Social Forestry (RLPS) for social aspects. However, the implementation of this concept and regulations of forest sector are far from the ideal one. Economic-driven policy seems become a main theme over forest management in Indonesia. Thus, discussion over PAs decentralisation becomes a sensitive issue since bad experiences over forest sectors led into forest degradation. Central government attempts to implement precautionary principle especially to decentralise the management of PAs (National Park). In this case, deconcentration is still predominant approach to be implemented upon the parks management, though there is an access for other parties to involve via co-management. Meanwhile, since 2003 Grand Forest Parks across Indonesia has been devolved to either districts or provinces. In the policy perspective is seen as the momentum of the new era of protected areas governance in Indonesia.

The Grand Forest Park in Indonesia is defined as a nature conservation area that has functions to collect plants and animals for either native or non-native types to be used in the interest of science, research, education, cultivation, culture, tourism and recreation (Law 5, 1990 about biodiversity). The notable aspect that distinguished grand forest park and others is the acknowledgement of cultivation in its designation. In this case the grand forest park is a combination site for in-situ (development of plants according to the original habitat) and ex-situ (outside of the habitat) conservation programs. Thus, the grand forest park consist not only native species

but also the “exotic” species (species that is introduced). Based on the data from Directorate General PHKA, currently the number of grand forest park reached 22 across Indonesia (table 6). The Djuanda Park based on the table is a small grand forest park compared to others. However, the establishment of the area is categorised as the old one. Since 1995, the Djuanda Park has been acknowledged as the grand forest park, compared with others that generally have been designated in early 21st century (1999-2004). In term of decentralisation for protected areas, the grand forest park is one the protected areas category in Indonesia that has officially been decentralised in the last decade.

No	Name	Location (Province)	Size (Hectare)	Underlying Laws
1	Cut Nyak Dien	Nanggroe Aceh Darussalam	6,300	Kepmenhut No 95/KPTS-II/2001
2	Bukit Barisan	North Sumatera	51,600	keppres RI No. 48, 1988
3	Dr. Mohamad Hatta	West Sumatera	12,100	Kepmenhut No.193/Kpts-II/1993
4	Sultan Syarief kasim	Riau	6,172	Kepmenhutbun No.348/KPTS-II/111
5	Thaha Syaifudin	Jambi	15,830	Kepmenhut No.94/Kpts-II/2001
6	Tahura Raja Lelo	Bengkulu	1,122	Kepmenhut No.21 KPTS/VI/1998
7	Wan Badul Rahman	Lampung	22,245	Kepmenhutbun No.679/Kpts-II/1999
8	Ir. H Djuanda	West Java	590	Keppres RI No.3, 1995
9	Tahura Palasari	West Java	35	Kepmenhut No.297/menhut-II/2004
10	Pancoran Mas	West Java	6	Kepmenhutbun No. 276/kpts-II/1999
11	Tahura Ngargoyoso	Central Java	231	Kepmenhut No.233/Kpts-II/2003
12	Gunung Bunder	Yogyakarta	617	Kepmenhut No.353/menhut-II/2004
13	Tahura R Suryo	East Java	27,868	Kepmenhut No.89/Kpts-II/2001
14	Tahura Ngurah Rai	Bali	1,392	Kepmenhut No.067/Kpts-II/1988
15	Tahura Nuraksa	West Nusa Tenggara	3,155	Kepmenhutbun No.244/Kpts-II/1999
16	Prof.H. Yohanes	East Nusa Tenggara	1,900	Keppres No.80, 1996
17	Bukit Soeharo	East Kalimantan	61,850	Kepmenhut no.419/Menhut-II/2004
18	Tahura Sultan Adam	South Kalimantan	112,000	Keppres No.52, 1989

19	Tahura Murhum	Southeast Sulawesi	7877	Kepmenhutbun No.103/Kpts-II/1999
20	Tahura Palu	Central Sulawesi	8,100	Kepmenhut No.461/Kpts-II/1995
21	Poboya Paneki	Central Sulawesi	7,128	Kepmenhut No.24/KPts- II/1999
22	Tahura Bontobahari	South Sulawesi	3,475	Kepmenhut No.721/Kpts-II/2004

Table.6 Lists of Grand Forest Parks in Indonesia, Source: Ministry of Forestry, 2013

Policy pertain to decentralisation over grand forest park management in Indonesia is initially begun when central government issued regulation (PP) no.25 year 2000. This law (PP) rules about sharing authorities between central and regional and districts over management of the grand forest parks. In the case of the Djuanda Park, since the park is located across different municipalities, thus West Java province has authority to manage it. Ministry of Forestry strengthens decentralisation policy upon the Djuanda Park by issuing a Forestry Ministerial Decree no.107/KptsII/2003 which stated that the management of the Djuanda Park was handed over to the governmental of West Java Province c.q the Bureau of the Djuanda Park as the technical organizer unit. Figure 10, shows the chronology of decentralisation policy to the Djuanda Park. The tug of war between central and lower level government has been bridged by the PP no.25 year 2000. Type of decentralisation in this case seems as devolution which means that province has ability to determine strategy, deliberately compose program and greater authority to run development of the park.

All interviewed state-participants agreed that authority in managing protected areas in Indonesia belonged to Ministry of Forestry based on Law 41 year 1999. Yet, specifically for the Djuanda Park, most of them agreed that grand forest park in Indonesia has been decentralised (devolution) from nation-state to regional government (province). It is based on government regulations (PP) No. 38 year 2007 and No. 28 year 2011 about sharing authorities among central, provincial and municipal governments over the management of the nature reserves and nature conservation areas, respectively. These PPs basically emerged in respond to the Law no. 32 year 2004 (revised version of Law 22, 1999) about regional autonomy.

However, in its implementation the results of decentralised grand forest parks governance in Indonesia are varied. It is noticeably due to different perspectives on perceiving park's values, degree of local government commitment for conservation sake as well as a socio-culture system.

In order to gain a more information about who should lead in running development of the Djuanda Park, statement from Ministry of Forestry as the central government authorities over protected areas has confirmed it. *“After it (the Djuanda Park) has been decentralised to provincial government, we could not involve into its management, we only provide general rules and regulations over protected areas management including grand forest parks, but responsibility to the area is wholly owned by governor or provincial governments (staff Ministry of Forestry, Source:direct interview).* In this respect, governor and or provincial government are the leading actor in terms of management (Ministerial Decree 107, 2003). Meanwhile, in running development of the park they should refer to general guidelines from central government (PP 38, 2011) (figure 10).

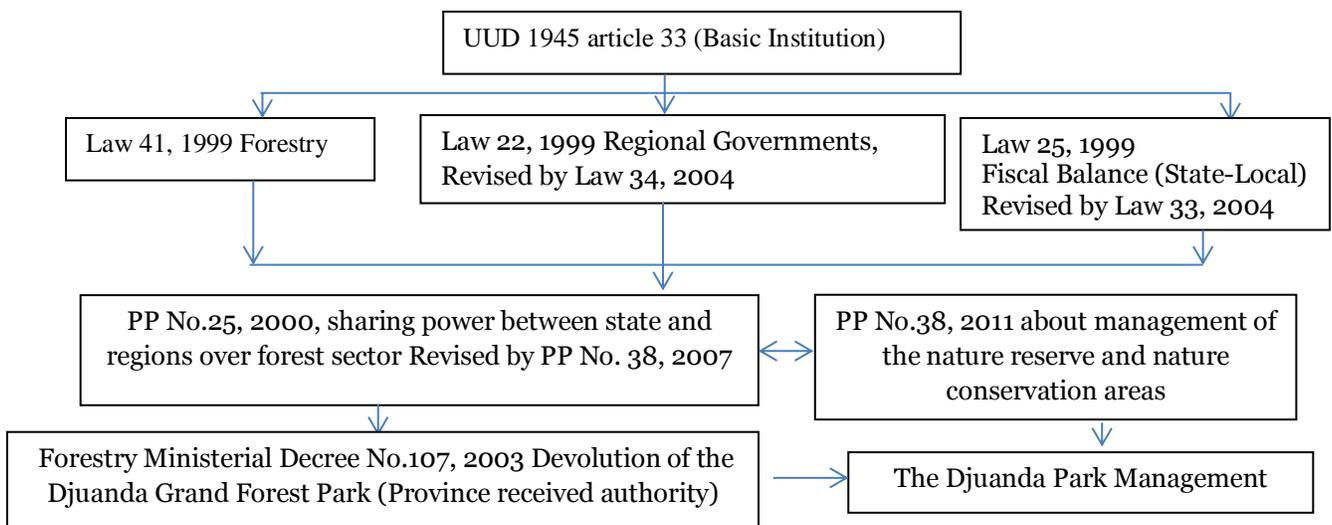


Figure 10. Chronology of the Decentralisation of the Djuanda Park Governance based on its underlying laws; Source: Author

Basically in the context of governance, there are two considerable notions of governance system over the Djuanda Park management: centralised and decentralised. As shown in the figure 11, during 1922-1985 is seen as the era of central-based system of the Djuanda park management, though in 1978 and in 1985 there was an initiative to delegate management to Perum Perhutani (State owned enterprise). Thus, actually the effort to decentralise some authorities over the Djuanda Park from central government to other parties has begun since 1978. Early of 2000 is seen as the momentum for decentralisation of the Djuanda Park. As previously described, the initiative to decentralise the park is in line with the forest sector decentralisation. The year of decentralisation reached a peak in 2003 when Ministerial Decree was issued to strengthen the role of West Java Province that officially to accept some authorities over the management of the Djuanda Park. The improvement of the performance of the protected areas under decentralisation era was continuously done. In 2006, collaborative management is the main approach of current decentralisation system implemented for all protected areas in Indonesia. Currently however, challenges after decentralisation and difficulties to implement collaborative management for the Djuanda Park remained exist.

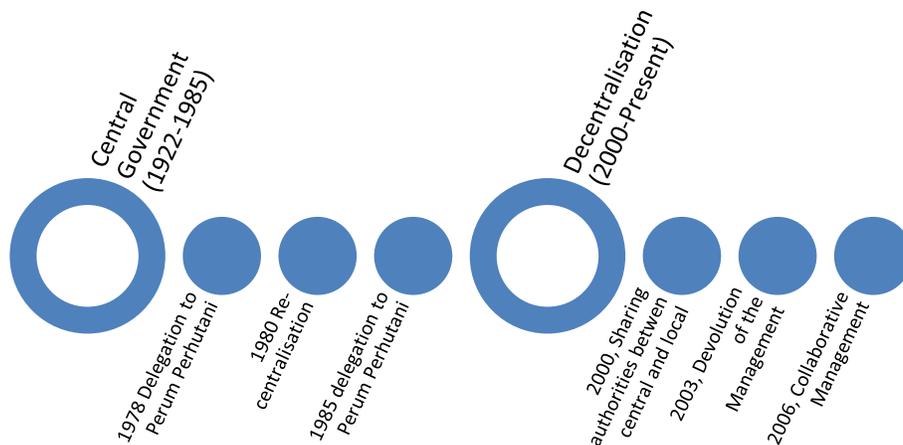


Figure 11. Timeline of the Djuanda Park Governance System; Source: Author

4.3 Main Contemporary Challenges of the Djuanda Park Governance

As one of the regional parks, the existence of the Djuanda Park has considerably improved and become part of the open green space for the City of Bandung. Many issues emerged from this research case study. Based on investigation including interview some

stakeholders there were three main issues currently interesting to be discussed.

First, is the water availability with concern

related to the declining number of water spring

(locally said as *Seke*). *Second* is the phenomenon of sedimentation and declining quality and quantity of water from Cikapundung River. As shown in the Figure 12, the Djuanda Park is seemed as an “island” surrounded by settlements and agricultural lands. The park actually is part of Cikapundung river valley and categorised as riparian ecosystem. Thus, land degradation over the Djuanda Park could directly impact to the Cikapundung River. *Third*, is pertaining to the buffer zone management of the park, if we look at the map, the park seems as an “island” surrounded by agriculture and settlement areas (light green). Buffer zone becomes a crucial issue since this area involves many institutions and even across different sectors to deal with. These challenges emerged and selected as the main theme after analysing interviews that were done during field study.



Figure. 12 A 3-dimesion of the Djuanda Park and its Surrounding
Source : Google Erath 2013

First related to the declining number of water springs. Based interviews with some stakeholders who are directly involved in the area of study (NGO and local people) the number of *Seke* (water springs) are relatively declined compared with was happened in the past. “*In the past people were easily to access water directly from small rivers or small water flows to their home, but now they used a long pipe to distribute it*” (figure

13) (NGO, source: direct interview). The relationship between water and culture within the Djuanda Park is strongly related. Some village names, for instance Kampung Ciseke, Sekeandur, Sekeangkrih, Sekeawi, Sekebalingling, Sekebulu and others were referred to the abundant of *Seke* (water springs) at that time (Bachtiar, 2007). It is shown that water becomes an integral part of local livelihood and influences much into their daily life. Results from this research shows that in the buffer zone of the park, it is founded that people are using a long pipe to drain water (from



Seke) to their home. Currently, people were also proposed to park

Figure 13 Water distribution pipe along the road,
Source: Author, 2013

manager for allowing them to access water that has been designated for generating power and public water provision. *“Recently people are urging us to allow them for gaining access to water that is designated for generating power and public water provision”* (park manager, source: direct interview). Apart from it needs many data to gain the conclusion, based on the statements there are a water availability issue within the Djuanda Park. Analysing of the statements, there are three things that come-up related to water springs decline. First, the existence of the water springs is fully supported by the emergence of the vegetation. Some species provide water and release it through their root system in a complex way. Thus, there is a degradation of forest cover in the Djuanda Park site. Second, the water issue could raise potential conflict between community and management of the part if there is no a concrete effort to address. It is due to water is the main element for livelihood and increased population in the surrounding area of the park increased the number of water needs. Third, involvement of people to participate into land rehabilitation program is essential. Water cannot be seen as “free element” anymore, people especially local communities

should responsible to maintain and to preserve the park for water sustainability. Thus, community empowerment and environmental campaign should always be a main theme of the Djuanda Park program.

Second, the anomaly of river water flow from Cikapundung River, river sedimentation and its impacts. Based on interview with engineer staff of PLN (State owned company for electricity) water from Cikapundung River has extremely changed in the last decades. *In the past, when a heavy rain was occurred in the upstream of the Djuanda Park, the water was flowing into river. It finally reached to the electric-pipe sized 3m³ constantly, but now it has changed it just dropped in a huge scale (even there was floods) bringing a lot of waste and in a few moments it was gone, increased and decreased very rapidly*” (electric company, Source: direct interview). Interesting point of this statement explicitly shows that there is a land degradation issue in the upstream of the Djuanda Park. First, the fact about rapid changes on water discharge (high runoff). Second, water is also bringing a huge waste that hamper electricity plant pipes to generate turbine. These two examples showed an anomaly water flow of Cikapundung Rivers Park and its impact to the performance of electric company. As explained in chapter 3, the Djuanda Park is small conservancy territory that is located within a large ecosystem named North Bandung Area (NBA). Despite the fact that the area has been designated for conservancy meaning, by large the area is vulnerable from land-use change in its surrounding area (NBA as a whole). In other words, carrying capacity of the park to maintain water and other environmental services is limited and much relies on its surrounding.



Figure 13. Road as a separator between the Djuanda Park (right) and the settlement (left), Source: Author

Third, the management of the buffer zone of the park becomes the crucial aspect since it calls cooperation among various governance system at multiple scales and sectors. As explained in Chapter 2, buffer zone is the fence before entering the park, thus literally the existence of this zone will directly affect to the existence of the park. Between the Djuanda Park area and its surrounding is only limited by road along the track to the area above it. Wide range land-use around the Djuanda Park cause increased pressure to the park intensively. Communities living around the Djuanda Park utilize underground water taken from the park area, sometimes they directly flow it using pipe (Figure 12). Not only local people who did this, some villas and mansions that are built in buffer zone of the park did the same. If there is no “rules of games” over the buffer zone, thus quality of the park could decline considerably in the future. Is there any spatial planning of the buffer zone of the area? Who should be responsible to take action in addressing the issue?

Regarding interviews with some actors who are engaged into spatial planning, issues about settlement and massive development in the buffer zone are complex. Despite, there is a regulation that aimed to limit the development of the zone, in reality this regulation do not implemented well. In addition, it becomes more complex since the development of the buffer zone has become part of the politic sphere. *“We were associated in the provision for zoning of protected areas and the area devoted to cultivation, but once again the spatial domain is very politically to say. So we are only able to make arrangements while the implementation has become the political domain”* (Staff of Spatial Planning Agency of Bandung Municipality, source: direct interview). In respect with the statement, complexity of the management of the buffer zone calls political willingness and strong leadership to deal with. Neither central government nor province should be able to manage the zone, but it requires involvement from multiple actors at multi-level governance system.

4.4 Impacts of Decentralisation over the management of the Djuanda Park?

The dynamic of governance system over the management of the Djuanda Park is interesting to be explored. The park has been transformed as an arena for exercising powers and authorities, an arena where among various level of governance system shared their values and responsibilities into decentralised system. Impacts of decentralisation over the management of the Djuanda Park remain questionable. It is due to the difficulties to differentiate between decentralisation impacts and reality happened in the field. However, what will be described below is based on investigation and analysis of the data during field study. In this case, current governance system that emphasised on shared governance model is not really seen in the reality.

4.4.1 Current Efforts in Addressing the Challenges

Decentralisation policy of the Djuanda Park governance in some extent has a positive side towards a better performance of the park. In this case, some notable points are recorded based on interviews and analysing data. First, commitment from Governor to support the sustainability of the park is relatively high. This commitment manifested through financial support to expand the park size. In this case, government attempts to acquire land (land purchasing) from people who lived within and closed to the park site. Second, public participation is relatively increased via local empowerment programs namely degraded-land rehabilitation, honeybee cultivation and youth program for environmental education campaign. Third, reconstruction of the role of non-state actors into decision-making process is urgent.

4.4.1.1 Commitment of Elected Governor to Enhance Conservation Goals

As the leading actor and manager for maintaining the Djuanda Park, West Java Governor has showed their efforts to deal with complex issue of its management. Based on interview with park office's staff, in terms of financial for conservation area, commitment of governor is relatively high to endorse restoration spatial quality of the

the North Bandung Area and the Djuanda Park. Figure.12 shows annually floods that hit several sub districts in Bandung Regency (blue within the map). In April 2013, number of victims of flash floods caused by the overflow of Citarum river basin amounted to 8000 people and makes it as the most throughout the year 2013 (Pikiran-Rakyat, 2013). Furthermore, in 2012 losses due to floods that hit some parts of Bandung regency has been estimated at Rp 48 billion (Pikiran-Rakyat, 2012). As noted before, Cikapundung River that passes through the Djuanda Park is one of a tributary of the Citarum River. By large, Cikapundung River directly affect to the overflow of Citarum River that “claimed” as the source for annual floods for the Bandung Regions. Based on this, resolving floods and increased commitment for environmental issues has become a crucial for elected governor to raise public trust and increased political bargain within parliament. In addition, the Djuanda Park seems as one of the arenas for elected leaders to play their politic manoeuvres.

Pertaining to land acquisition through purchasing there are benefit and drawback of this approach. First, in the positive side, purchasing land from local people who “considered illegal by law” is the first innovation to do. Conflict between local people who occupied the land in protected areas and park management are common in the context of Indonesia. People who lived within and near to the park claimed they lived there for generations. By purchasing the land, government has acknowledged the existence of them as part of the park entity. It can reduce conflict and it becomes the best way in seeking win-win solution for property rights issue. Second, apart from purchasing method has its own benefit, does not mean that it is the best one. The purchase method becomes a bad precedent for other parks that have similar situation. Meanwhile among provinces in Indonesia are vary in terms of financial ability and allocation budget for the parks. How about the province that has no sufficient budget to buy land mechanism as did by West Java Province to the Djuanda Park? What should they do? In addition, compared to other countries, Indonesia has small ability to finance their conservation areas. *“This condition can be seen from the magnitude of the cost of conservation by the government amounted to U.S. \$ 2 per acre. This figure*

is very small when compared to Malaysia which set aside U.S. \$ 20 just for the cost of forest conservation” (Neraca, 2013). If the purchase method is implemented in other conservation, areas how much budget allocation should be provided by government?

Based on these, in running development of the park, governor should have different perspectives and ability to consider all aspects. Talking about land sometimes invite politic distraction that increased tensions in social aspect. Thus, precautionary principle should always be in mind in terms of managing the protected areas.

4.4.1.2 Enhanced Public Participation via Local Empowerment

One of the aims of decentralisation policy is increased participation since power and its supporting entities are getting closer to those affected people. Improving spatial quality of the area has been done through collaboration management by involving local community. There are some mechanisms in order to empower for unemployment local communities that lived around the park. *“We engage them (unemployment people) as a parking attendant, opening a small shop to peddle souvenirs, and young people we trained them as a tour guide and interpreter” (Staff of Park office, Source: direct interview).* One of the stories during research field is that people who involved into community empowerment program have a ‘bad’ background in the past. In this case, some of them were villain. However, with personal approaches that were done by some NGOs, slowly they shifted to be a more care to environment and actively involved into conservation program. People who currently did all jobs as mentioned within the Djuanda park area are the actor within the story. Lessons from this story are that conservation and socio-economic issues are interrelated and become a main characteristic of PAs. Thus, each stakeholder should put attention much on for whom conservation program is done, who would be a main player and what outcomes that is to be achieved.

Another program to increase local participation into conservation is rehabilitation of degraded land and honeybee cultivation within forest area. These programmes have benefits to switch livelihood from traditional farming to conservation-based farming.

“If beekeeping programme succeed, we will allow them to sell it to visitors and it becomes a unique product of the Djuanda Park in the future (staff of the park Office, source: direct interview). Lesson from this activity is that combining socio and economic aspects into local daily life is urgent to do before take them into conservation issues. In doing so, “local languages” of the local people and setting vocal in tune with them is one of the appropriate ways to do. In this case, if they talk about poverty, famine seasons, keeping their children alive, and our mind should set in line with the issues. They do not accept any terms of conservation, biodiversity, sustainability, governance and so forth. Translating language of the local is not only required a talent and knowledge but also the sense of humanity. Putting ourselves that pretend to be like them is one of the methods in gaining their trust. In that moment, local people are fragile and vulnerable from temptation of political experts. Based on my experience, in building trust of local people is neither an easy way nor an instantly done. It takes a long time, intensive interactions, being like them and always listening what they perceived about protected areas.

Giving a space for “the inferior groups”- those who are forgotten, those who reluctant for conservation, those who are worry the impact of conservation to their activities, and those who only know that conservation program means that everything are forbidden, strictly management, and there are consequences for those who against it- into decision making arena will create a meaningful discussion. Somehow, local people are feeling that they are abandoned; they are a minority class within decision-making arena. Instead, they have a brilliant idea, knowing better of the issues, they have a tight social-capital which can utilise for free for improved management. Based on interview and investigation in the Djuanda Park site, the manager attempts to raise a more participation especially from local people into those empowerment programs. However it calls other parties to involve and NGOs play their main role to endorse public participation.

4.4.1.3 Reconstructed the Importance of Non-State Actors into Management?

In dealing with complex issue as protected areas, polycentric approach emphasised on sharing responsibilities among different actors is essential to be adopted. Thus, interaction between state and non-state actors should always be when making the agenda for PAs management. Current management office has acknowledged the meaning of non-state actors into planning discussion especially within the water issue. However should be supported by a concrete action in the future since collaborative management becomes the main theme for current management of PAs in Indonesia. *“We encouraged the other parties to be more involved into planning discussion of the park, currently we finished collaborative meeting named Forum Peduli Air (Water Care Forum) with our partners from PLTA Bengkok (Electric State Owned Company) and PDAM (public water provision company) including experts and leader of local people in discussing water availability within the park. (The Park office staff, Source: direct interviews).*

Non-state actors (private sectors, academics, and NGOs) are basically having ability to accelerate achievement of the sustainability of the PAs. For instance, private sector they have a noticeable financial instrument to boost conservation program that in line with their business core. Based on investigation, PLTA Bengkok (Electric state own company) has arranged land rehabilitation program in the upstream Cikapundung River that is expected improved its quality. Sometimes, they innovation is beyond than what state actors are thinking about. *“We have just known that “pundung” was the name of plant species that in the past it was grown up around the Cikapundung River. Hence, we have a planning to reintroduce the plant into their habitat. We are serious by saying that” (Staff of PLTA Bengkok, source: direct interview).* Based on the statement there are two notable points: first, environmental issues within PAs is beyond institutional boundaries and becomes an integral part of private sectors to generate their activities. Apart from the motive of the private sector in some extent is driven by their business activities; the commitment to preserve nature in the Djuanda Park should be appreciated. Second, past experience of the park in assembling its

historical life is noteworthy. As the title of this chapter, past experience opens the new ideas, new inspiration for stakeholders to take a better pathway towards sustainability. Pundung species that in the past were growing around the Cikapundung River might become a clue to re-inventing the complex system of the Djuanda Park and eventually address issues of sedimentation. Nature is the best example of how connecting one functions to another. They source of knowledge through which actors should learn from. Thus, it becomes an input for park's manager in deciding program collaborated with other parties.

Meanwhile, academics are important to give a new insight for a better management of PAs. In the case of decentralisation of the PAs governance in Indonesia, academics have proposed the idea the so-called "unique decentralisation". Regarding this, among protected areas have different culture, social, ecological and characteristics that embedded which could not be uniformly managed. In other words, it is context dependent. *"We have discussed and proposed what we called as a "unique decentralisation" over national parks (NPs) management, due to characteristics of each NP (nature, culture, social) is different. And decentralisation is not the same as devolution. Decentralisation requires role of central in providing general guidelines to be implemented based on area characteristics"* (Expert from IPB, source: direct interview). Lessons from this statement are some academics perceived that decentralisation currently implemented in Indonesia is less put attention on context-dependent matters. Yonariza & Shivakoti, 2008 argued that in the case of Bukit Barisan I Nature Reserve decentralisation policy should be implemented until the village level since they have ability to protect the area from destruction. Meanwhile, central government only put district level as the lowest governance system into decentralisation of protected areas. How about the Djuanda Park? What type of decentralisation should be implemented? This question need further investigation and require a depth interview with academics. Yet, based on the interviews, the issue is not about who should receive the authority but beyond than that. The issue is how to optimise the role of non-state actors to deal with increased complexity over the

management of the Djuanda Park. Thus, strengthen the role of academics into management should be prioritise and they have been acknowledged not only in present days but since a long time ago when central government designated leaders from ITB, IPB and Padjajaran University as advisor for the Djuanda park management.

Collaborative approach implemented on current governance system of the Djuanda Park is seen has contributed to lift up NGO as a key partner. Based on interviews, one of the notable roles of the NGO to support the sustainability of the Djuanda Park is enabling public participation into conservation programs. As a critical actor of public policy, NGOs have an extensive network either among themselves or across sector in the local level, national and even global. Within the frame of Djuanda Park governance, NGOs has acknowledged as a partner to boost a meaningful participation from public on conservation program. *“Since a long time ago we had fully supported conservation program for people who lived nearby to the park. Currently we have Indonesian Communication Forum of Cadres Conservation (FK3I) which has member of students either university or high school. They were involved in conservation program such as rehabilitation in planting Zone of the park, environmental education and so forth (Walhi Jabar-NGO source: direct interview).* NGOs is seemed as a partner to mobilise community and vocalise conservation messages to those people who could not deal with *“law languages”*, tough we should be also considered that not all NGOs are purely act for the conservation or local people sakes. Thus, a building trust and increase accountability as a core of decentralisation should be done in advance, within a progress and after the program done.

Despite, park manager or provincial government are the predominant authorities in governing the park, commitment of other non-state actors are valuable also to be discussed. Sharing experiences, knowledge, responsibilities and values are key point within planning arena to enhance the sustainability of the Djuanda Park. Indeed, setting rules of the games, strategy and job division is the crucial ones. Ensuring that all stakeholders have similar seat and facilities in vocalising their opinion in the neutral atmosphere is relatively challenging.

4.4.2 Evolving Issues of Multi-level Governance System in The Djuanda Park

Some issues that remain crucial to be discussed that currently occurred in the Djuanda Park are mainly related to interaction among governance systems at different levels. The issues that will elaborate in this chapter are based on interviews from all stakeholders that wrapped up into three aspects. First, is insufficient of the number staff and experts in terms of protected areas. Second, it seems that there is a less integration policy making among stakeholders. Third, such unclear roles and responsibilities over buffer and transition zones governance of the park. These issues are crucial to be raised since it would be a depart point for the thesis to formulate a recommendation for a better performance of the Djuanda Park management.

4.4.2.1 Insufficient of Experts in Dealing with Complex Issues

A transition period of authority to manage the park from central government to provincial is the crucial moment through which decentralisation goals are at stake. Previous decentralisation over forest sector in Indonesia resulted negative impacts to forest areas. It may appear due to insufficient guidance from central government in aiming the local to deal with complex issue over protected areas. Central guidance and assistances are essential to ensure that the aims of decentralisation are on the right track. In this case, general guidance that can be translated into local perspectives is needed to synergy triad pillars of sustainable development over protected areas governance.

Complex issue over management of the Djuanda Park not only related to conservation per se it is beyond than that. For instance, in dealing with politician such a good lobbying expert is needed. This person should be able to communicate about conservation to other parties in a simple language, correct and straight to the point. In terms of budgeting for custodians of the park, park manager needs assistance on how to create a good argumentation within proposal report. It is important since, the budget for conservation requires a huge amount and in the realm of politic, it is not interesting

theme to be discussed. Politicians are likely preferred economic growths, social actions etc. that are tangible and could raise their popularity in the eyes of public.

In addition, based on the interviews, the management also need capacity building from central government. Central seems have many experts who are working in the field of conservation and protected areas. For instance, there is functional staff that make an endangered species-breeding program, species identification programme, measuring quality of river basin areas and so forth that is continually done in order to gain a good data as a basis for decision-making. *After the Djuanda Park officially devolved to provincial government, there is no significant support from central government in guiding us to achieve a better management performance. In contrast, we lack of reliable staff that have expertise in conservation strategy, financing system for conservation code and so forth. When we proposed many programs related to conservation, budgeting agency in provincial does not recognise it and deleted our proposals (Staff of Park Office, Source: direct interview).* In respect with this statement, there are some points that are essential to be discussed: First, central government is needed to provide training and increased capacity building of the Djuanda Park staff. Second, involvement of higher education into training program for Djuanda Park staff is essential.

Local governance with their short experiences needs a technical knowledge to deal with conservation issues within PAs. Ministry of Forestry consists of staffs who are experts in some technical aspects to improve management of the protected areas. Meanwhile, provincial government might only have structural staff which expertise in designing and policymaking and less expertise in technical measurement. For instance in Ministry of Forestry there are staff who observing the watershed areas, staff who have expertise in laboratories for plant cultivation and animal breeding, animal behaviour and so forth. In terms of budgeting program, there are staff who expertise in green economics, accountancy system for conservation and so forth. Thus, central government should responsible to assist and guide the park management by providing

training for park's staff. In this case, the ability of park's staff to deal with protected areas issues whether biodiversity, financing, politics and so forth is increased.

Besides central government, higher education is able to be partner in providing such training to increase capability of the Djuanda Park's staff. Involvement of this institution is expected gives a new insight for a better management. In addition, it becomes a considerable point for management of the park to create a collaboration approach. There are two benefits for both management and higher education if this collaboration is concretely done. For the park office side, if the ability of the staff could increase, therefore it is expected that their performance should increase. Meanwhile for the higher education, it contributes into their understanding of running management of the park in practice. Besides that, higher education could involve students to learn on how creating programs that increase performance of the park. This could be fruitful for them after finished their study and entering job. Mutual relationship between education and park management eventually could tighten the meaning of collaboration.

4.4.2.2 Less Integration of Policy Making Among Stakeholders

Environmental issues and protected areas are complex. It across administrative boundaries, inter regional and institutional and calls for integrated approach to deal with. Realizing that all stakeholders are facing the same challenges, such cooperative and collaborative approaches are necessary. Setting the rules and strategies, which a clear guideline for each actor is urgent in defining what challenge should be prioritised and what kind of approach to be used to reduce uncertainty over the management of protected areas. In contrast, during interview sessions with privileged participants there are unsynchronised programmes and strategies. For instance, many of them were concerned on rehabilitation by planting tree. This programme is not set in one direction instead, each of them is created with their own planning. Moreover, this has resulted overlapping program, less of trust building and "inefficiency" resources. If

among stakeholders there is a one vision in perceiving challenges and creating program within one direction, the optimum results would occur.

Yet the question is how to synchronise program in coping with environmental issues happened in the Djuanda Park? Decentralisation offered two main goals as its characteristics: the accountability and participation. Accountability refers to transparency of exercising resources: financing, strategy, rules and other equipment of planning and management. If this goal is achieve then participation would emerge automatically. It requires beurocracy reformation for state actors that many non-state actors are needed. Indeed, an open information system of the management of the Djuanda Park for public is essential. It is due to financing program and managing the area for custodian are from public tax, through which check and balances are always be there.

Integrated policy making also requires a strong leadership to ensure that all stakeholders have the same direction. Overlapping program, less coordination and less of communication among stakeholders might become a clue to evaluate current management system. In multi-level governance system, all actors have their own roles and responsibilities and how to synchronize them apparently is crucial. Who actually should be a leading actor in the case of the Djuanda Park? Regarding interviews, most the states and non-state actors confirmed that the Djuanda Park manager is the one. However, in reality this statement seems is not really appear. It needs a formal agreement that showed the park manager as the leader to gain a legitimation from all actors.

4.4.2.3 Complexity over Buffer Zone of the Djuanda Park

As explained in the chapter 2, the buffer zones of the protected areas are the place through which multi-level governance is disseminated. If we look at the Djuanda Park map in figure 12, there is a phenomenon where Djuanda Park seemed as an island. It is surrounding by agriculture and settlement areas and pressures to the areas are relatively high. It refers to the authorities and roles of each stakeholder in defining the

areas. From ecological point of view, the buffer zone is a fortress that protects the utilisation and core zones from intensive human disturbances. In addition, if we zoom in the location of the Djuanda Park, thus it is actually part of the bigger ecosystem the so-called North Bandung Area. Therefore, conservation and socio-ecological system of the Djuanda Park should be taken into North Bandung Area as its umbrella.

Based on the interview, commitment to actively participate over the Djuanda Park management is high. It is due to the park has been clearly stated by law and have a legal certainty as the conservation area. In other words, all stakeholders for preservation legitimately acknowledge the conservation function of the park. In contrast, Bandung North Area that has issues that are more complex is less legitimately to be considered as the “protected areas”. Despite regulations and spatial planning document of West Java Province has accommodated and put the areas as priority for preservation purposes, development for settlement and other non-preservation functions are massive happened within the area (Kompas, 2012). Indeed, good political willingness from parliament and other government bodies to maintain the area as the protected areas are essential. It requires a guideline from central government that flexible in implementation to deal with complexity issues. Based on this, in the frame of socio-ecological system, Bandung North Area is an integral part of the Djuanda Park site. Degradation land quality that might happen in the NBA could trigger the Djuanda Park into the same consequences. Thus, talking of decentralisation over PAs governance requires a broader perspectives and calls integrated approach to deal with complexity issues in current days.

4.5 Conclusion

Decentralisation of protected areas governance in Indonesia is facing many challenges on its journey. Reaffirming the aims of decentralisation demands huge efforts, multi-disciplinary approach and requires broader actors to engage in. Although, in its implementation is not an easy as its conception, decentralisation over PAs governance in Indonesia is able to enhance the sustainability of territorial system classified as

protected areas. Based on empirical case examination, The Djuanda Park experienced decentralisation policy within its transformation journey. Since 1922, the park has undergone many forms of governance system from central-based approach, private management, local-central relations and eventually collaborative approach with provincial as the leader. Many lessons can be learned from the Park journey to meet its sustainability. Indeed, as a policy decentralisation has always brought two different affects: positive and negative.

Next chapter is emphasis the summary of the thesis as well as recommendations for improvement. Some notable points will be highlighted in order to gain clear notions of the thesis.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

By and large the research aims affects the conclusion of the thesis. The aim of the thesis was to examine the effects of decentralisation and multi-level governance systems for the sustainability of protected areas. Current decentralisation in some extent has not improved the PAs governance in Indonesia. It needs transformation in its implementation based on the Djuanda Park case. This chapter is divided into three sections. First the conclusion mainly focused on current management of the Djuanda Park: the story behind decentralisation, the challenges and some lessons learned. Second describes the reflection of the research. Third, is policy recommendations based on research examination.

5.1 Conclusions

Indonesia faced a huge shift in the realm of governance administration and political aspects after the fallen of the New Order in 1998. The year after, Laws 22, 1999 and Laws 25, 1999 were issued. These laws ruled and constituted regions autonomy and fiscal balance between central government and provincial or districts governments respectively. Meanwhile, at the same year Law 41, 1999 were emerge which seemed contradict with the previous laws. In order to synchronise among those laws, central government issued government regulation (PP), 25, 2000 that governs the relationship between central and local decision making under decentralisation. In 2003, the management of the Djuanda Park has officially been decentralised to provincial government and it becomes a momentum for decentralisation over protected areas in Indonesia. However, challenges in the management Djuanda Park are not necessarily disappear after decentralization occurs. It remain exist and seems to be more complex.

Water and buffer zone are two challenges that currently need to be taken into management discussion. Declining the number water springs indicated there is massive land degradation not only within the park but also in the upstream and its

surrounding. Concrete efforts are needed to deal with this issue and it calls for corporative governance. Similar case is also happened if talking about Cikapundung River and its services both for generating electricity and provision of public water services. The vital role of Cikapundung River is threatened by massive sedimentation that occurs along with its path. Collaborative and comprehensive planning is needed among all stakeholders to reduce a more severe sedimentation. Meanwhile, buffer zone is the crucial area since it invites multi-level governance at multi-spatial administrates to cope with. Such a massive land-use change over the surrounding area of the Djuanda Park could also threaten the sustainability of the park.

How current management authorities respond the challenges? Governor or West Java Province as the recipient of authority over the Djuanda Park reacts by doing land acquisition via purchasing land of enclave areas both within and surrounding of the park. However, it seems in between of the realm of manoeuvre of politics and purely for conservation sake. Besides that, this method becomes a bad precedent for other provinces even central government in respond to the similar case. Increased participation especially from local communities is the next agenda to reduce negative impacts of the challenges. In this case, some of them are involved within conservation programs as honey bee cultivation, rehabilitation of degraded-land areas and youth campaign of conservation issues. Finally, involvement of non-state actors to be more actively participating is the big agenda taken by current managers. Private sectors, academics and NGOs play and important role to enhance achievement of effective management of the park.

However, those efforts made by park managers face some constraints on its journey. Insufficient of staff that has expertise in dealing with complex issues of PAs becomes the first obstacle. It needs central government and higher institutions to support and provide them with training and capacity building program. Thus, it is expected the pace of current management to reach a better performance may appear. Less integration among different actors in running program within the Djuanda Park is the

next one. PAs governance calls cooperative and sharing responsibilities over the burden of management to all actors. Thus, strong leadership is urgent to deal with the issue. However the question then who are the appropriate one? Does the park manager is the one? Since there is no formal agreement appears at this moment, this statement remains questionable. Lastly, complexity of the buffer zone is not easy to deal with as the expected one. Such broader institutions and multiple actors are involved into discussion. It is not only talking about the Djuanda Park but it also recalls for the North Bandung Area as the umbrella of addressing the issue.

5.2 Reflections of the Research

As a researcher, I do believe that all finding results and conclusion within the thesis are part from the objective one. However, all the results presented within this thesis are approximately following the academics standard for thesis research. In this section, I would to emphases some notable remarks. First, it related with participants that are selected for the interview since I do believe that different person has different context that resulted the different outcome of the study. Thus, to reduce a bias of the research I attempted to select the participants based on their core background and experiences that similar with the core of the thesis. Second, is pertaining to generalisation of case study research (context dependent). Indeed, within case study research, context dependent becomes the big issue. Lessons learned that promotes within the thesis are expected to be fruitful for others in gaining the new insight towards a better improvement of PAs governance. Third is about the matter of time that is correlated with depth analysis of the study. Since I took the study for gaining data within three weeks, therefore it contributes into the results of my analysis. Fourth, the notable point which I wanted to improve during the study is the participant from politician. I do believe politician has a big role in aiming the argumentation within the thesis. Spatial planning policy research requires not only bureaucrats to involve with but also politicians. It is due to planning has become a part of the realm of politics. And lastly, fifth, opinion form the readers is important to lead the thesis is more objective rather

than too descriptive. In this case, deep thinking and analysis is the essential one towards improved version of the research.

5.3 Policy Recommendations

Reflecting from the conclusions and reflections above, thus during research I come up with the idea of social-innovation in coping with challenges of protected areas governance in the Djuanda Park. Despite the notions are seen abstract, this recommendations actually embedded within various governance levels.

1. Law enforcements over the buffer zone of the Djuanda Park should lead by central government. It also supported by synchronised regulations among various governance systems within.
2. To deal with the evolving issues, a multidisciplinary background of stakeholders is acquired. It leads towards comprehensive management (social, economic and environment) with watershed of Cikapundung as its basis.
3. Restrictions on the development of the upstream Cikapundung and replanting some endemic species of the Djuanda Park should be done via a mutual agreement. Thus, it needs an active involvement of local communities as social control, in case of any destruction and violation of the agreement.
4. Social networking should be reworked via community empowerment programs (CSR, joint program and collaborative management). It is expected could reduce financial constraints of the management.

A good research of protected areas governance demands a series type of conducting study. Since the study is referred to the qualitative methods as its core of analysis, the quantitative researches over the impacts of decentralisation policy in PAs is needed. It would completely give a new insight on how to deal with complexity of PAs. Examining governance of PAs that focused on buffer zone will be fruitful for current management of the Djuanda Park.

Implication of the finding results of the thesis will become an input to create a comprehensive spatial planning document. Does the current challenges of the Djuanda Park affect to the long-term view of spatial planning of West Java region? Spatial planning process specifically for North Bandung Area should accommodate a conservation issues within upper of Bandung region. The Cikapundung River that has a vital role of water resources for the region of Bandung seems as the critical point to depart for planners and policy makers to reinvent current spatial planning arrangements.

References

- .'Kepmenhut No.107/Kpts-II/2003 tentang Penyelenggaraan Tugas Pengelolaan Tahura oleh Gubernur atau Walikota/Bupati.
- .'Peraturan Pemerintah No.25 tahun 2000, tentang Pembagian Wewenang antara Pemerintah Pusat dan Daerah.
- .'Peraturan Pemerintah No.38 tahun 2011, tentang Pengelolaan Kawasan Suaka Alam dan Kawasan Pelestarian Alam
- .'Undang-Undang No.41 tahun 1999, tentang Kehutanan
- .'Undang-Undang No.22 tahun 1999, tentang Pemerintah Daerah
- .'Undang-Undang No.25 tahun 1999, tentang Perimbangan Keuangan Antara Pusat dan Daerah
- Abbass, D., 2004. Decentralisation in forestry continues despite disappointments. *Appropriate Technology*, p. 32.
- Affolderbach, J. & Parra, C., 2012. Cross-disciplinary Perspectives on Governance. In: *Cross-disciplinary perspectives on governance*. In: J. Affolderbach, T. Du Bry, J., O. Gonz Development, poverty and global crises: reinforcing governance. Brussels: P.I.E. Peter Lang, pp. 11-27.
- Bachtiar, T., 2007. *Archives: walhijabar*. [Online]
Available at: <http://walhijabar.wordpress.com/2007/page/78/>
[Accessed 13 6 2013].
- Batterbury, S. P. & Fernando, J. L., 2005. Rescaling Governance and the impacts of political and environmental decentralisation: and introduction. *World Development*, 34(11), pp. 1851-1863.
- Bethari, D., 2013. *environment: thejakartapost.com*. [Online]
Available at: <http://www.thejakartapost.com/news/2013/04/30/sei-betung-the-spirit-restoration-action.html>
[Accessed 15 July 2013].
- Boden & Ledingham, 2013. *About Us: watertonbiosphere*. [Online]
Available at: <http://www.watertonbiosphere.com/about-biosphere.html#sustainable>
[Accessed 1 7 2013].

- Brockington, D., Duffy, R. & Igoe, J., 2008. *Nature Unbound Conservation, Capitalism and Future of Protected Area*. 1st ed. London: Earth Scan.
- Carthy, J. M., 2001. *Decentralisation and Forest Management in Kapuas District, Central Kalimantan*, Bogor: CIFOR.
- Dubois, H. F. W. & Fattore, G., 2009. Definitions and Typologies in Public Administration Reserach: The Case of Decentralisation. *International Journal of Public Administration*, 32(8), pp. 704-727.
- Dudley, N., 2008. *Guidelines for Applying Protected Area Management categories*, SWITZERLAND: IUCN.
- FAO, 2013. *Decentralization and Environmental issue: fao.org*. [Online] Available at: <http://www.fao.org/docrep/005/y4256e/y4256e05.htm> [Accessed 30 6 2013].
- Folke, C., Hahn, T. & Olsson, P., 2005. Adaptive Governance of Social-Ecological System. *Annu. Rev. Environ. Resour*, p. 441–73.
- Guess, G. M., 2005. Comparative Decentralization Lessons from Pakistan, Indonesia, and the Philippines. *Public Administration Review*, p. 217.
- Harttera, J. & Ryan, S. J., 2010. Top-down or bottom-up?Decentralization, natural resource management, and usufruct rights in the forests and wetlands of western Uganda. *Land Use Policy* 27 (2010) 815–826, pp. 815-826.
- Healey, P., 2006. Transforming governance: Challenges of Institutional adaptation and a new politics of space. *European Planning Studies*, pp. 299-320.
- Hollenbach, A. J., 2005. Promise or Peril? The Fate of Indonesia's Protected Areas in an Era of Decentralisation. *Journal of Development and Social Transformation*, pp. 79-87.
- Hudalah, D. & Woltjer, J., 2007. Spatial Planning System in Transitional Indonesia. *International Planning Studies*, pp. 291–303,.
- Huitema, D., Lebel, L. & Mejerink, S., 2011. The strategies of policy entrepreneurus in water transitions around the world. *water policy*, 1(13), pp. 717-733.
- IISD, 2012. *iisd.org*. [Online] Available at: <http://www.iisd.org/sd/> [Accessed 5 february 2012].

- JabarProv, 2010. *About Us: Tahura Juanda*. [Online]
Available at: <http://tahuradjuanda.jabarprov.go.id/>
[Accessed 22 10 2012].
- Jänicke, M. & Jorgens, H., 2006. *New approaches to Environmental Governance*, Berlin: Freie Universität Berlin.
- Jordan, A., 2008. The governance of sustainable development: taking stock and looking forwards. *Environment and Planning C*, 26(1), pp. 17-33.
- Kompas, 2012. *regional: kompas.com sepenggal hutan lestari di Bandung Utara*. [Online]
Available at:
<http://regional.kompas.com/read/2012/07/27/03533718/Sepenggal.Hutan.Lestari.di.Bandung.Utara>
[Accessed 19 4 2013].
- Lafferty, W. & Hovden, E., 2003. Environmental policy integration: towards an analytical framework. *Environmental Politics*, 12(3), pp. 1-22.
- Larson, A. M. & Soto, F., 2008. Decentralization on Natural Resource Governance Regimes. *Annu. Rev. Environ. Resour.*, Volume 33, pp. 213-39.
- Lemos, M. & Agrawal, A., 2006. Environmental governance. *Annual Review of Environment*, 31(3), pp. 297-325.
- Lockwood, M., 2010. Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of Environmental Management*, Volume 91, pp. 754-766.
- Lu, D.-J., Chou, Y.-F. & Yuan, H.-W., 2005. Paradigm shift in the institutional arrangement of protected areas management in Taiwan—a case study of Wu-Wei-Kang Waterfowl Wildlife Refuge in Ilan, Taiwan. *Environmental Science & Policy*, pp. 418-430.
- Makapukaw, A. L. S. A. D. & Jr., F. S. M., 2004. *Decentralising Protected Area Management A Mount Kitanglad Range National Park Experience*, Interlaken, Switzerland: Profor.org.
- Martin, O. & Piatti, G., 2009. *World Heritage and Buffer Zones (Patrimoine mondial et zones tampons)*. Davos, UNESCO World Heritage Centre.

McCarthy, J., 2001. *Decentralisation, local communities and forest management in Barito Selatan*, Bogor, Indonesia: Center for International Forestry Research.

Neraca, 2013.

<http://www.neraca.co.id/harian/article/23642/Biaya.Konservasi.Hutan.Masih.Rendah>.
[Online]

Available at:

<http://www.neraca.co.id/harian/article/23642/Biaya.Konservasi.Hutan.Masih.Rendah>
[Accessed 4 8 2013].

Neuman, W. L., 2000. *social Research Methods*. 4th ed. Boston: Allyn and Bacon.

Obidzinski, K. & Barr, C., 2003. *The Effects Decentralisation on Forests and Forest Industries in Berau District, East Kalimantan*, Bogor: CIFOR.

Oliveira, J. A. P. d., 2002. Implementing Environmental Policies in Developing Countries Through Decentralization: The Case of Protected Areas in Bahia, Brazil. *World Development*, 30(10), p. 1713–1736.

Oxforddictionaries, 2013. <http://oxforddictionaries.com/definition/english/governance>.
[Online]

Available at: <http://oxforddictionaries.com/definition/english/governance>
[Accessed 29 6 2013].

Parra, C., 2010. Sustainability and multi-level governance of territories classified as protected areas in France: the Morvan regional park case. *environmental planning management*, pp. 491-509.

Parra, C., 2012. The Vicissitudes of the French regional Park Model illustrated through the Life of History of the Morvan. *Environment and History*, Volume 18, pp. 561-583.

Parra, C., 2013. Social Sustainability: a competing concept to social innovation?. In: F. Moulaert, D. MacCallum, A. Mehmood & A. Hamdouch, eds. *The International handbook and social innovation*. Leuven: Edward Elgar Publishing, pp. 142-152.

Pikiran-Rakyat, 2012. <http://www.pikiran-rakyat.com/node/212814>. [Online]

Available at: <http://www.pikiran-rakyat.com/node/212814>
[Accessed 4 8 2013].

Pikiran-Rakyat, 2013. *Bandung Raya: pikiran-rakyat.com*. [Online]
Available at: <http://www.pikiran-rakyat.com/node/230195>
[Accessed 4 8 2013].

Pimbert, M. P. & Pretty, J. N., 1995. *Parks, People and Professionals: Putting 'Participation' into Protected Area Management*. Geneve, UNRISD,.

Resosudarmo, I. A. P., 2010. Closer to people and trees: will decentralisation work for the people and the forests of indonesia?. *The European Journal and Development Reserach*, 16(1).

Sudirman, D. W. a. N., 2005. *Local Policy-making Mechanisms: Processes Implementation and Impacts of the Decentralized Forest Management System in Tanjung Jabung Barat District, Jambi*, Bogor: Cifor.

Tokede, M. et al., 2005. *The Impacts of Special Autonomy in Papua's Forestry Sector: Empowering Customary Cummunities (Masyarakat Adat) in Decentralized Forestry Deevelopment in Mandokwari District*, Bogor: Cifor.

Torkar, G., Zimmerman, B. & Willebrand, T., 2011. Qaulitative Interviews in Human Dimensions Studies About Nature Conservation. *VARSTVO NARAVE*, Volume 25, pp. 39-52.

unescap.org, 2013. *Good governance :unescap.org*. [Online]
Available at:
<http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp>
[Accessed 29 6 2013].

Vanclay, F., Baines, J. T. & Taylor, C. N., 2012. Ethical professiobal practice and social impact assessment. *Impact Assessment and project Appraisal (Draft)*.

Yasmi, Y. et al., 2005. *The Complexities of Managing Forest Resources in Post-decentralization Indonesia: A Case Study of Sintang District, West Kalimantan*, Bogor: Cifor.

Yasmi, Y., Guernier, J. & Colfer, C., 2009. Positive and negative aspects of forestry confl ict: lessons from a decentralized forest management in Indonesia. *International Forestry Review Vol.11(1)*, pp. 98-110.

Yonariza & Shivakoti, G. P., 2008. Decentralization and Co-management of Protected Areas in Indonesia. *Journal of Legal Pluralism*, Volume 57, pp. 142-165.

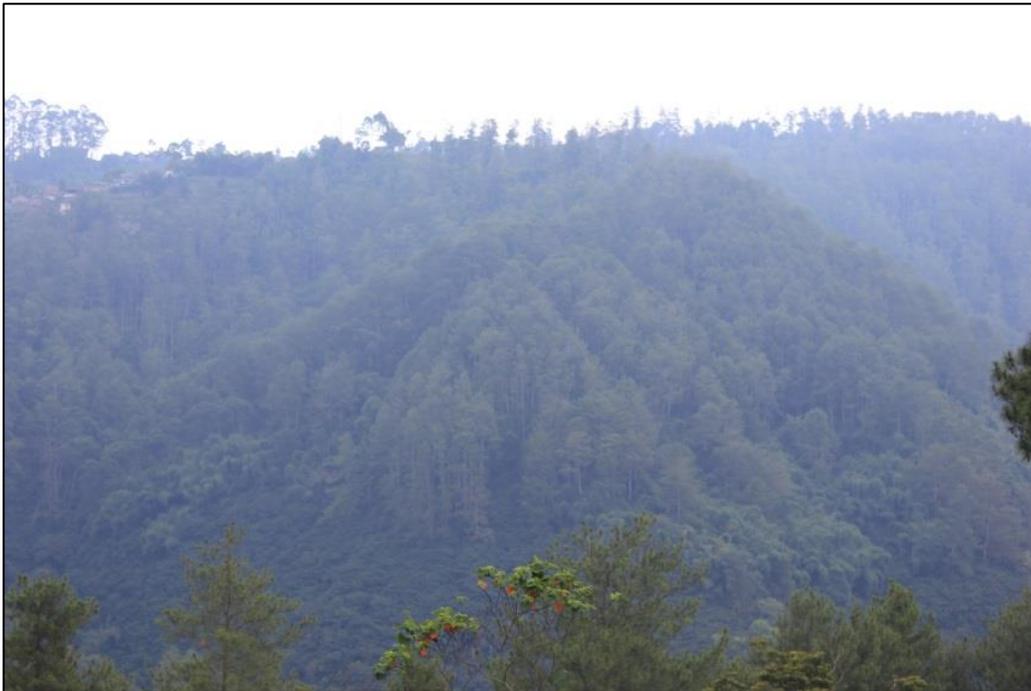
Zachary, V., 2011. *Decentralization on Protected Areas Management in Indonesia: Case Study of Barisan I nature reserve*, Seoul: Seoul national University College of Agriculture and Life Sciences.

Zimmerer, K. S., 2000. The Reworking of Conservation Geographies: Nonequilibrium Landscapes and Nature-Society Hybrids. *Annals of the Association of American Geographers*, 90(2), pp. 356-369.

Zimmerer, K. S., Galt, R. E. & Buck, M. V., 2004. Globalization and Multi-spatial Trends in the Coverage of Protected-Area Conservation (1980–2000). *Royal Swedish Academy of Sciences*, Volume 33.

Zuidema, 2011. Making Sense of Decentralization in Environmental Policy. In: *Stimulating Local Environmental Quality*. Zutphen. : Wöhrmann.

Appendix 1 Panoramic of the Djuanda Park



Appendix 2, Maps of Bandung North Area

Figure 1. West Java Province within Indonesian Archipelago
Source: Google Earth, 2013



Figure 2. North Bandung Area (red line) within West Java Province, Source: Google Earth, 2013



Figure 3. Map of Western Part of NBA Source: KBU, 2013

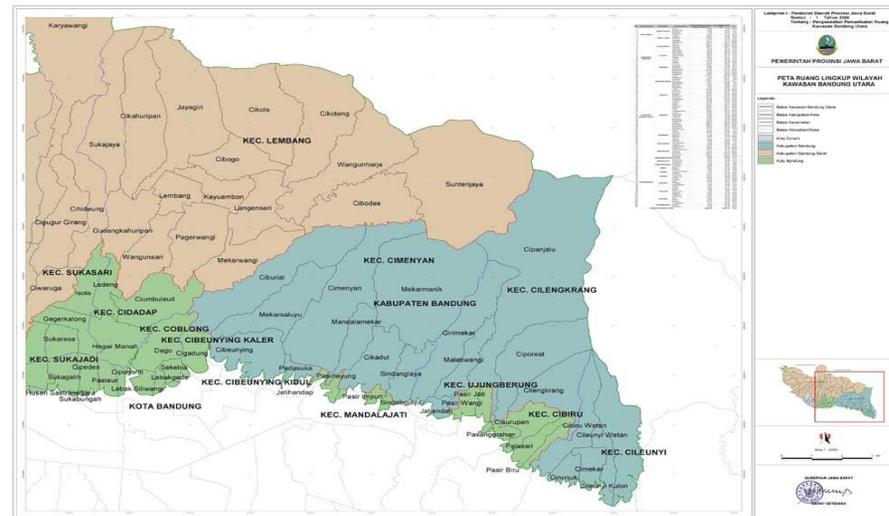


Figure 4. Map of Eastern Part of NBA Source: KBU, 2013

Appendix 3. Lists of Questions for interview

Type of actors	List of interview questions
Nation-states	<ul style="list-style-type: none"> - Could you explain argumentation behind decentralisation? - What are considerations (criteria and indicators) is used? - What objectives could achieve by doing this? - Which driven forces are dominant in doing this (global, local or mixed)? - What are the Djuanda park values for national and global meaning? - What is role of nation after decentralisation (financial support, capacity building and harmonizing regulation)? - How you describe decentralisation process happened in the Djuanda? - How you perceive a successful decentralisation and how you arrange to do that? - Is decentralisation in the Djuanda can possibly happen in other protected area? - What should nation-state do in order to achieve smooth decentralisation process? - Which actors do you think has a significant role to lead collaboration? From which? Why?
Regions (Park Office)	<ul style="list-style-type: none"> - How you describe the importance of the Djuanda for the regions?What significant impact of decentralisation to the Djuanda management (financial, capacity building and spatial quality)? - Could you describe the differences before and after decentralisation? - How you conceive current collaboration among stakeholders under decentralisation? - How you perceive coordination of direction in policy making after decentralisation (content, procedure and process)? - What is the challenge for the Djuanda after decentralisation phase? - What do you expect for career improvement under decentralisation? - How about flexibility in strategy making for short and long term? - How do you synergise different actor with different scale into management? - What do you expect from decentralisation for internal institution, human resource development and financial support?

	<ul style="list-style-type: none"> - What should you or institution do in order to achieve that? - Which actors do you think has a significant role to lead management? Why?
Municipalities	<ul style="list-style-type: none"> - How you describe the emergence of the Djuanda Park? - How you perceive the Djuanda park in its relation to urban environment quality? - Is there any idea that specifically should be done in order to achieve a better performance? - What core of problem in synergising strategy between your institutions and upper level of government? - Which actors do you think has a significant role to lead management? Why? - What constraints for municipal institution in dealing with current problem of the Djuanda? Why do you think that? - Who are significant actors might useful into management process? And Why?
Private Sectors	<ul style="list-style-type: none"> - What motivation for you in doing collaboration? - What potential benefits your institutions gained after decentralisation? - How you describe the existing of Djuanda (environmental services) to your institution activities? - What impacts are occurred if degradation spatial quality within the area continually happened? - What are main problems in managing the area? How you contribute to solve that? - Would you like to contribute in promoting the area for corporate tourism activities? - In terms of education-oriented activities, how your institutions frame it into continually agenda? And how link it with tourism unit in the Djuanda Park office? - What your institution constraints in supporting management the area? - Do you intend to continue collaboration program? Why and why not? - Which organization of collaboration do you prefer formal or informal? Why?
Academics	<ul style="list-style-type: none"> - What benefits and drawbacks of decentralisation of protected areas? - What background of knowledge is urgently needed currently for improving the area? - What potential benefits and its pitfalls by involving multidisciplinary approach

	<p>in managing protected area? How you perceive that?</p> <ul style="list-style-type: none"> - What actually a main theme for the Djuanda park to be more exist and what key point in selling this area to consumer? - What position of your institution in improving the management? Why do you think that? - Are there any specific skills which are needed in current management? What and why? - What methodology and kind of research is needed regarding to the area? - How you frame public-education relationship to foster sustainability of the area? - What social learning can be gained from collaboration activities?
NGO	<ul style="list-style-type: none"> - What innovation would you like to propose for a better management? - What is core of problem in doing collaboration among stakeholders? - What are motivations for you taking part into decision making? - How do you see the effectiveness of management after decentralisation? - How do you perceive current management comparing before (decentralisation process)?
Local Community	<ul style="list-style-type: none"> - How you describe the Djuanda for daily activities? - Are there any specific beliefs or values crystallised between social-nature relations? What and how to frame that into its uniqueness? - Could you describe me about historical of the area? - What approach current institution done to raise local participation? How it is supposed to be done? - In some degree do you satisfy with current management performance? Which elements are significant? Why? - How you frame your position within area management (inferior-superior, partnership, and subject-object)? And why you think like so? - What actually do you expect of decentralisation process of the Djuanda Park? - Is there any threatens and worries about policy under decentralisation for your daily life? What and why? - Which one is better: current institution policy or previous one? Why?