

**COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT:
THE IMPLEMENTATION OF COLLABORATIVE PLANNING
IN BOTSWANA AND INDONESIA**

A thesis submitted in partial fulfillment of the requirements for
the Master Degree from Institut Teknologi Bandung and
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THESIS

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DOUBLE MASTER DEGREE PROGRAMME



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INSTITUT TEKNOLOGI BANDUNG**

AND



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FACULTY OF SPATIAL SCIENCE
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ABSTRACT

Title : Community-based Natural Resource Management: The Implementation of Collaborative Planning in Botswana and Indonesia
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This research is about Community-based Natural Resource Management (CBNRM) related to the implementation of collaborative planning. In order to find out how collaborative planning perspective can contribute to the implementation of CBNRM concept, three indicators are used: public participation, local institutions, and government policy. It also seeks for failure and success factors of implementation of CBNRM in Botswana and Indonesia.

Botswana still faces the problems of rural poverty. It has low population–land resource ratios and its government has taken seriously the devolution of powers to manage natural resources since the mid-1980s. This has involved CBNRM initiatives since 1990 as part of a Southern African Development Community (SADC) regional program funded by the United States Agency for International Development (USAID), focusing mainly on wildlife and tourism.

Indonesia as the second study case has a very large number of local ethnic communities, many still dependent on local forest and marine resources for their livelihoods. Those local forest and marine resources became the main focus of the CBNRM project in Indonesia started in 1990s.

This research concludes that Botswana can be said to be more succeed in terms of having national CBNRM forum and clear organization structure of CBNRM and is trying to finalize its policy on CBNRM. However, all in all Botswana and Indonesia share almost the same experience in CBNRM regarding collaborative planning perspective. Public participations in both countries are in the stage of symbolic participation and real participation, and some are in manipulation stage. Meanwhile, local institutions exist in CBNRM practice in both countries. They are actively and effectively involved in their environment and even empower themselves as one of main point of CBNRM. Finally, Botswana and Indonesia do not have special laws of CBNRM. Yet, they have sectoral and local regulations that support the practice of natural resource management by community.

Keywords: community-based natural resource management, collaborative planning, Botswana, Indonesia.

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Preface and Acknowledgement

Living in Indonesia, a country of which natural resource is rich, I'm familiar with green environment. Not only it is healthy and refreshing my eyes, but it also gives lives to the society. Back to the elementary school years ago, we were taught that our country is blessed by God with so many splendid things: the land, the sky, and the sea; that even "stick" and "stone" buried would give you plants¹. This condition sometimes make Indonesian forget that we have to preserve those blesses. The continuing development often sacrifices the environment and the societies. Later there is awareness to develop the country while let the societies take care of their surroundings, as they have their own local wisdom to protect it. This thesis is about environmental management by community or Community-based Natural Resource Management from Collaborative Planning point of view. Botswana and Indonesia are taken as the case studies.

It is almost impossible to acknowledge all those who have supported me in writing my thesis. To Allah SWT I would like to utter my gratitude to give me chances to study in the Netherlands and finish my thesis. It is my honor to work on this thesis with full support from my supervisors. Therefore, I would like to address my special thanks to my supervisors Dr. Femke Niekerk (RuG) and Ir. Tubagus Furqon Sofhani, MA., Ph.D (ITB) for giving me comments, criticisms, suggestions, and feedback on my thesis. I'm also thankful to Bappenas and Netherlands Education Support Office (NESO) for financial support during my study in ITB and RuG and to Setdakab Bengkulu Utara for giving me permission to grab the opportunity to study more. I would also like to thank all my lecturers in ITB and RuG, staff members in ITB and RuG. I also give my huge appreciations to all my friends in DD ITB 2006 for making my live so colorful, for giving me support and lending me your thought and strength.

Special thanks are also devoted to all my family for their prayer, patience and support during my study in Groningen.

Groningen, August 2007

Henny Ramayani

¹ In *Kolam Susu*, a song sang by Koes Plus (an Indonesian band).

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ABBREVIATIONS

BNP	Bunaken National Park
BNPMAB	Bunaken National Park Management Advisory Board
BOCOBONET	Botswana Community-based Organization Network
CBNRM	Community-based Natural Resources Management
CBO	Community-based Organization
CHA	Controlled Hunting Areas
DWNP	Department of Wildlife and Natural Parks
FMPTNB	<i>Forum Masyarakat Peduli Taman Nasional Bunaken</i> (Bunaken National Park Concerned Citizen's Forum)
JVP	Joint Venture Partner
NGO	Non-Governmental Organization
NRM/EPIQ	Natural Resource Management/ Environmental Policy and Institutional Strengthening
NRMP	Natural Resource Management Project
NSWA	North Sulawesi Watersports Association
SADC	Southern African Development Community
TAC	Technical Advisory Committee
USAID	US Agency for International Development
WMA	Wildlife Management Areas

CHAPTER ONE

INTRODUCTION

1.1. Background

The achievement of sustainable development goals is one of objectives of countries all over the world. Due to this issue, many countries have developed regulations and policies aiming at conserving and enhancing the natural resources base. Each plans made should be considered to environmental quality protection. However, these plans and policies are made by central government without knowing the condition of localities. Those top-down policies uniformly set the same plans and solutions. Sometimes those would make local communities as victim. That condition makes the environment worsened. The communities who get their livelihoods from their surroundings exploit the environment uncontrollably. In the end sustainable development is far from achieved.

Deep concern of sustainable environment makes scholars and practitioners think of something different. Community participation in decision making and in protecting environment and resources may considered be needed for the longer term maintenance of environmental quality.

Sustainable development also associates with the empowerment of local people and the encouragement of people's participation in development and environmental issues (Mitchel, 2002). This argument is supported by the fact that many environmental issues especially in natural resources management are deal with several interests. Hence, it may be important to take advantage and understanding of these interests in environmental management. It means that the people who are living for or counting on natural resources provision are able to

actively participate in the maintenance of environmental quality and the anticipation of possible negative impacts. These perspectives are the basic idea for Community-Based Natural Resources Management (CBNRM).

Armitage (2005) resumes some definitions given by Pomeroy (1996), Borrini-Feyerband (1996) and Barrett et. al. (2001) that CBNRM is an approach to promote better resource management outcomes with the full participation of communities and resource users in decision-making activities, and the incorporation of local institutions, customary practices, and the knowledge systems in management, regulatory, and enforcement processes.

It is a process whereby local people and communities organize themselves and play a central role in identifying their resources and their development priorities, and in implementing natural resources management activities. It starts with communities as a foundation, strategic process of identifying needs and local capacities by involving and aligning stakeholders - both within and beyond the community - and ends with community as a focus. The approach seeks to encourage better resource management outcomes with the full participation of communities and resource users in decision making activities, and the incorporation of local institutions, customary practices, and knowledge systems in management, regulatory, and enforcement processes (Pomeroy 1996; Borrini-Feyerband 1996; Barrett and others 2001 in Armitage, 2005). The emphasis on local is based on the sense that local communities are better able to understand and intervene in environmental problems because they are 'closer' to both the problem and the solution.

CBNRM involves many actors: local communities, governmental agencies, NGOs and scholars. In order to meet the objectives of CBNRM, those actors have to collaborate and participate, share technical skills, knowledge and funds. Process of collaboration and learning is about consensus building, discussion, debate and communicative rationality where choices are founded on that which subjects agree

upon instead of technical knowledge alone. In this view, planning is aimed at making new knowledge. The interaction between stakeholders involves collectively inventing solutions as well as listening to and learning from one another (Healey, 1997). Learning includes acquiring knowledge about the problem and learning about people's ideas. This is the basic of collaborative planning.

Botswana is a comparatively wealthy African nation. It has been able to provide education, health and social security, and this has been important in guaranteeing a minimum level of welfare for its population. Moreover Botswana has low population–land resource ratios and its government has taken seriously the devolution of powers to manage natural resources since the mid-1980s. This has involved CBNRM initiatives since 1990 as part of a Southern African Development Community (SADC) regional program funded by the United States Agency for International Development (USAID), focusing mainly on wildlife and tourism. The society of this region mostly depends on its natural resources to fulfill their daily needs. However, very often this condition cannot be met due to the limited access to some resources for some people at certain places. In these communal lands, where over 60% of the population lives, a system of 'indirect rule' was in place and traditional leadership structures were supposed to play a role in land and resource management. But the ability of these traditional structures had been seriously eroded by their tenure status. They had no powers of exclusion and access to certain natural resources were denied to them (Murphree, 1993).

Indonesia is a country of unparalleled cultural and ecological diversity. Its tropical forests and seas are among the richest in the world; migrations, trade, colonization, diffusion and adaptation have given rise to hundreds of distinct cultural groups across the 17,000-island archipelago. The country has a very large number of local ethnic communities, many still dependent on local forest and marine resources for their livelihoods. NGOs and government alike extolled the

nation's rich cultural heritage, and nostalgically praised the "environmental wisdom of the ancestors" (e.g., Salim 1995 in Thorburn 2002). However, their respective attitudes toward the living descendents of these ancestors diverged widely. To the government, forest-dwelling communities were "forest encroachers," their traditional livelihood systems criminalized as theft and destruction of national resources (Thorburn, 2002). In the name of protecting preserved areas, government does not hesitate to chase them out from the environment they used to live.

Both Botswana and Indonesia have experienced strong influence of central government to their local natural resources management. This research will figure out the implementation of CBNRM in those countries in relation with collaborative planning.

1.2. Research Objectives

This research is aimed at understanding the community-based natural resource management (CBNRM) related to the implementation of collaborative planning. It seeks for failure and success factors of implementation of CBNRM in Botswana and Indonesia.

1.3. Research Question

This research is developed based on some research questions, those are:

1. What is the concept of CBNRM and its linkages with collaborative planning?
2. How can collaborative planning perspective contribute to the implementation of CBNRM concept?
3. What are the factors of failure and success of CBNRM?

1.4. Research Methodology

As a guidance to answer the research objectives, this research is developed into several methodological steps (figure 1.1):

1. *Theoretical framework development*

The first step is to develop a theoretical framework of CBNRM and collaborative planning as the base of this research. It explores the concept of CBNRM and its linkages with collaborative planning.

2. *Collecting data concerning the practice of CBNRM in Botswana and Indonesia*

The data collected are related to issue of CBNRM in practice in Botswana and Indonesia as input for chapter three. For this step, secondary data of various literatures from books, journal articles, internet and other sources of publications are used.

3. *Analysis*

In this step the experience of CBNRM in Botswana and Indonesia will be examined. It use comparative analysis method based on some indicators formed in chapter two.

4. *Conclusion and recommendation*

The last step presents research findings and proposes some policy lessons and recommendation for the implementation of CBNRM.

The diagram below shows the research methodology of this thesis:

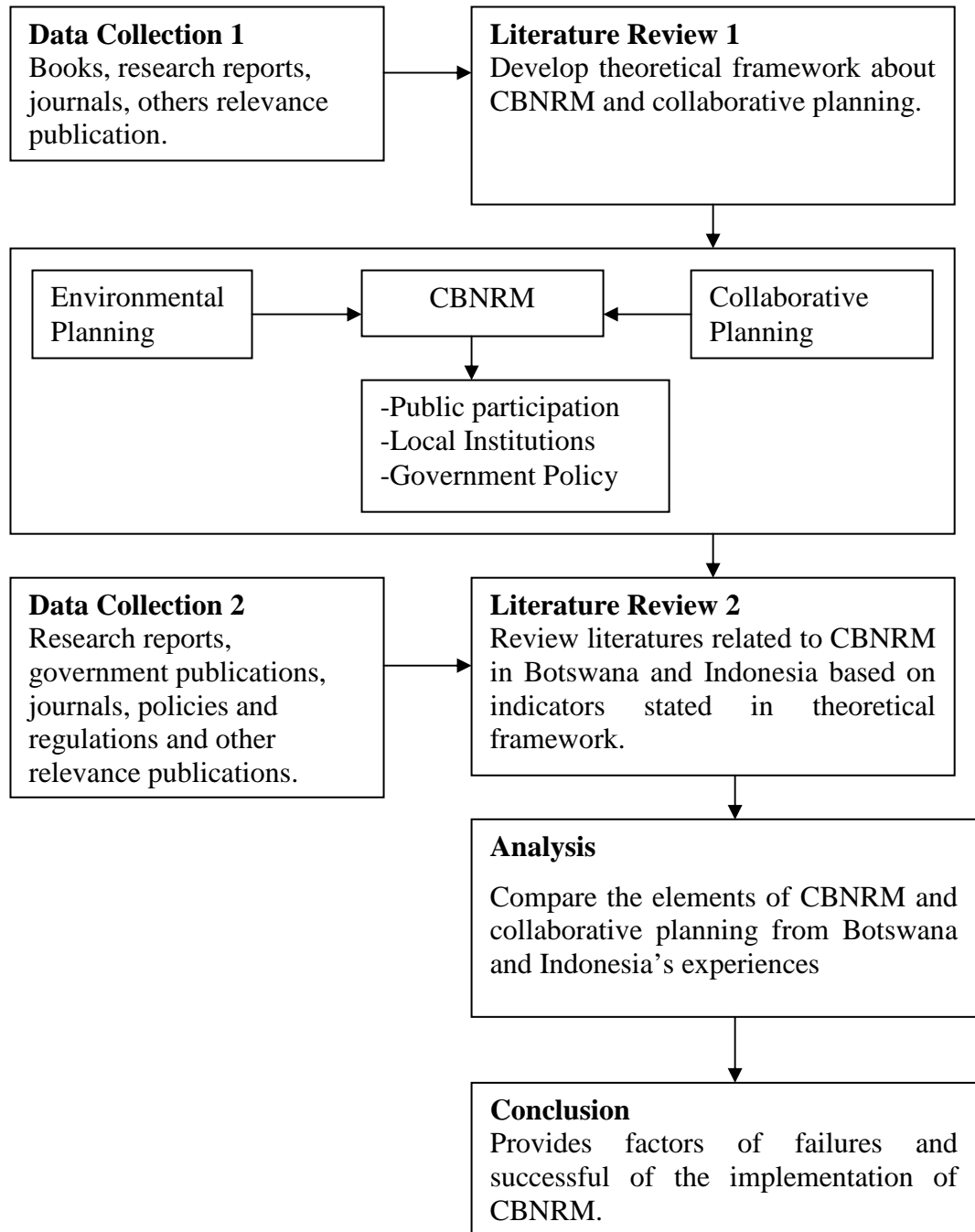


Figure 1.1: Research methodology

1.5. Report Structure

This report consists of five chapters. Content of each chapter can be described as follows:

Chapter one : Introduction

This chapter provides background of this research and followed by the elaborations of research questions, research objective, research methodology, and report structure.

Chapter two : Theoretical Framework

This chapter elaborates the theoretical framework and empirical base for this report. It provides concepts of collaborative planning and CBNRM and several indicators needed to analyze study cases.

Chapter three: CBNRM in Practice

CBNRM from collaborative perspective is elaborated more in this chapter based on the experiences of Botswana and Indonesia.

Chapter four : Analysis

This chapter compares the implementation of CBNRM in Botswana and Indonesia. It also shows several factors supporting the performance of CBNRM.

Chapter five : Conclusion

The last chapter provides research findings and recommendation.

The following figure of report structure and research framework will facilitate in understanding this thesis.

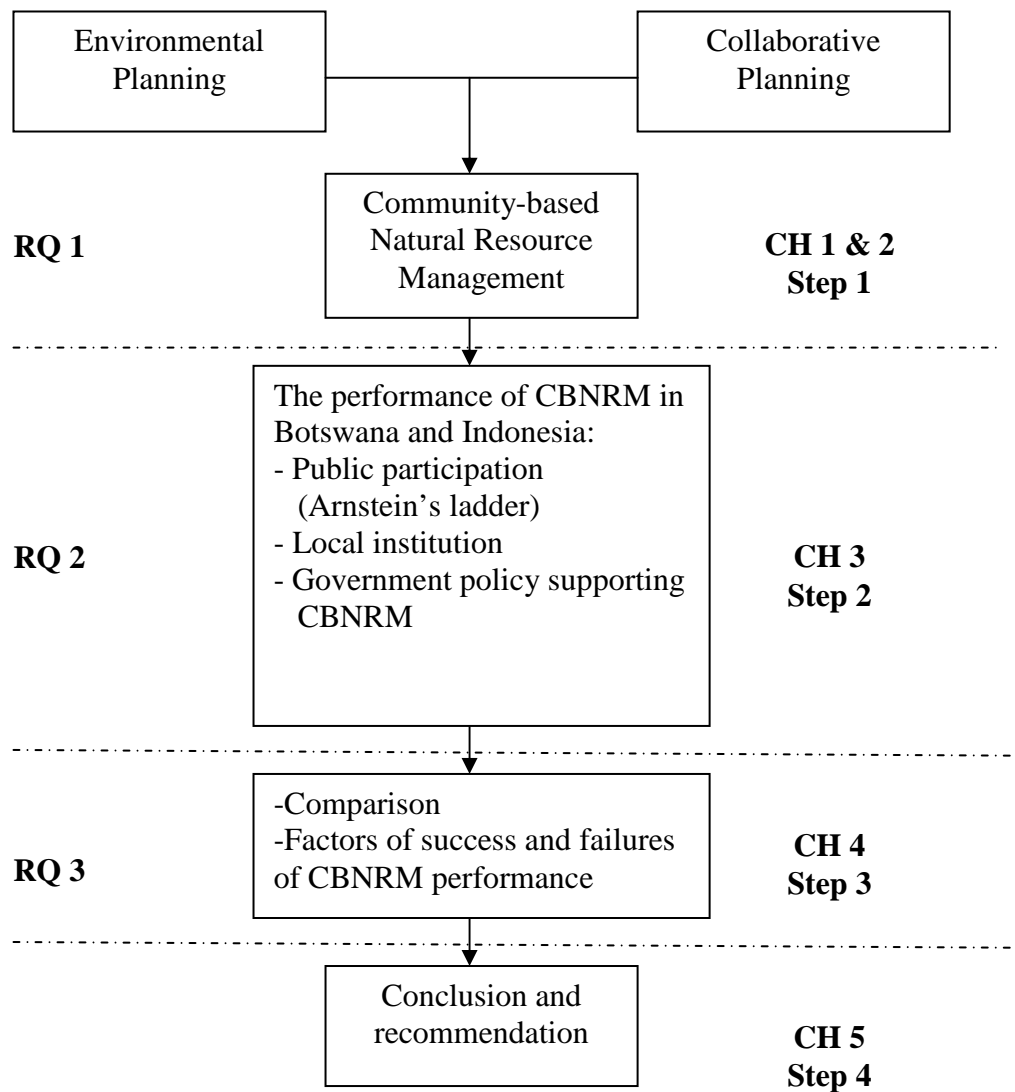


Figure 1.2: Report structure and research framework

CHAPTER TWO

THEORETICAL FRAMEWORK

Chapter two provides the theoretical framework for this research. It starts with looking at the Environmental Planning and Collaborative Planning perspectives that frame CBNRM. The next part shows what CBNRM is and the last part is about the relationships of CBNRM and Collaborative planning perspective which give indicators used in the next chapter.

2.1. Basic Consideration

2.1.1. Environmental sustainability in planning

Since Rio Summit in 1992, sustainable development has become important target to be achieved in the development of many countries. The main ideas of sustainable development goals is to preserve present generation's needs and future ones that one of those is the preservation of natural resources. However, the continuous of economic development in a country cause on the depletion of natural resources. Therefore, the achievement of sustainable development goals may have some difficulties.

Due to this issue, many countries have developed regulations and policies aiming at conserving and enhancing the natural resources base. Each plans made should be considered to environmental quality protection. However, the changes in laws only may not be sufficient to protect fully common interest (Mitchel, 2002). Community participation in decision making and in protecting environment and resources may be needed for the longer term maintenance of environmental quality.

Sustainable development also associates with the empowerment of local people and the encouragement of people's participation in development and environmental issues (Mitchel, 2002). This argument is supported by the fact that many environmental issues especially in natural resources management are deal with several interests. Hence, it may be important to take advantage and understanding of these interests in environmental management. It means that the people who are living for or counting on natural resources provision are able to actively participate in the maintenance of environmental quality and the anticipation of possible negative impacts. These perspectives are the basic idea for Community-Based Natural Resources Management (CBNRM).

2.1.2. Collaborative Planning

Collaborative planning develops an approach to understanding and evaluating governance processes, and especially those that focus on developing qualities of place and territory (Healey, 2003). It focuses attention on the relational webs or networks in lives (Healey, 2006). Moreover, she argues that the particular forms of collaborative process may have the potential to be transformative, to change the practices, cultures and outcomes of 'place governance'. Moreover, particularly, it may also have potential to explore how, through attention to process design, such processes could be made more socially just, and, in the context of the multiplicity of urban social worlds, more socially inclusive.

The same idea is explored by Ury et al (1988). He describes collaboration as a process in which groups with differing rationalities explore disputes in a constructive way and collectively invent options that go beyond personal perceptions or limited views (Woltjer, 2000). Basically, the idea of collaboration is premised on the belief that planning does not have to be a competition where one party wins and one party loses, or where both sides settle for a compromise. Gray (1989) describes collaboration as "a process through which parties who see different aspects of a problem can constructively explore their differenced and

search for solutions that go beyond their own limited vision of what is possible” (Woltjer, 2000).

Complexity and *diversity* of human perceptions on something become main concern in collaborative planning. In essence, Healey (2003) states that collaborative planning is a plea for the importance of understanding complexity and diversity, in a way that does not collapse into atomistic analyses of specific episodes and individual achievements, or avoid recognizing the way power consolidates into driving forces that shape situational specificities. Something has to be bore in mind that in this concept, planning is social constructive. People influence their environment and culture, and in return they are affected by environment and culture as well.

Furthermore, *locality* is another important aspect in collaborative planning. Governance processes in this kind of planning are unique constructions in specific situations. Locally-based institutions are dynamics and uniquely designed by those who use them. Healey emphasizes the importance of thematic actions need to be initiated by the local government to identify the *genius loci* (conflict of a process-based and a normative apprehension of local quality) (Healey, 2007).

Diversity, social construction and localities are basic elements of CBNRM. They give power for it to operate in terms of place-based, using local knowledge and empower local people. Hence, collaborative concept is relevant to be adopted for CBNRM.

2.2. Community-based Natural Resources Management (CBNRM)

2.2.1 Definitions of CBNRM

Armitage (2005) states that there is no single definition of CBNRM. He resumes some definitions given by Pomeroy (1996), Borrini-Feyerband (1996) and Barrett et. al. (2001) that CBNRM is an approach to promote better resource management

outcomes with the full participation of communities and resource users in decision-making activities, and the incorporation of local institutions, customary practices, and the knowledge systems in management, regulatory, and enforcement processes (Armitage, 2005).

From the process management point of view, process aspects concern the manner how changes can be recognized and implemented. The design of a process is important for its substance that is processes produce substance. Main arguments for process management, which are also part of important elements in CBNRM are: support, reducing substantive uncertainty, enriching problem definitions and solutions, incorporating dynamic, transparency in decision making, and depoliticizing decision making (Bruijn, et al, 2002).

The concept involves a process whereby local people and communities organize themselves and play a central role in identifying their resources and their development priorities. They also involve in the implementation of natural resources management activities due to the communities as a foundation in strategic process. The process starts with the identification of needs and local capacities by involving and aligning stakeholders - both within and beyond the community - and ends with community as a focus. The emphasis on local capacities is based on the sense that local communities are better able to understand and intervene in environmental problems because they are 'closer' to both the problem and the solution.

Furthermore, the argument on the importance of local communities is also supported by Fortmann et al (2001) describing CBNRM based on four assumptions:

- Local people are reasonably knowledgeable about local ecosystems, more than outsiders.

- A benefit flow can be created from management activities that significantly overshadow the costs of coexisting with the resource of the benefits foregone from other uses or management strategies.
- A group capable of implementing management strategies exists.
- Control over the resource will be devolved to the community.

The position of community in natural resources management becomes more important during the time. They are not only as 'object' as acceptor, but also as 'subject' which is important to construct a concept and a decision and a manager in practice. This approach got into consideration during the early 1970s when the outcome of capital-intensive, large-scale and centrally-planned conservation and development projects disappointed many parties (Horowitz and Painter, 1986 in Kellert et al, 2000).

2.2.2. Actors of CBNRM

Besides involving community, CBNRM also takes other actors in managing natural resources. Actors in CBNRM negotiate and share the responsibility for management of a specific area or set of resources. They are local communities, government or state agencies, NGOs, and scholars.

Local communities (resource users, residents, local leaders) are the main actor of this approach. The communities have control to accomplish the effective management of resources at local level. The management requires the exercise of authority and control by local actors over three critical domains: (1) making rules about the use, management, and conservation of resources; (2) implementation of the rules that are created; and (3) resolution of disputes that arise during interpretation and application of rules (Agrawal and Gibson, 1999).

Nevertheless, state agencies, another actor of CBNRM, have also certain capacities that local communities lack. The same social distance from local users

that raises the costs of monitoring and enforcement can also insulate state managers from the negative social pressure that can be brought to bear on those who impose conservation measures or redistribute harvest opportunities. State managers may have access to larger-scale ecological information as well as tools of data analysis that are not available to local communities.

Finally, NGOs and scholars have a role as the guardian of CBNRM. Besides transferring knowledge and funds, they keep an eye of the process of this approach to be on track.

Those actors are highly connected in decision making process of CBNRM. The process tends to take place in network actors cannot be relied on hierarchical mechanism. Each actor depends on other parties. Process of consultation and negotiation with other parties reflects the mutual dependencies in a network. (Bruijn et al, 2002)

2.2.3. Characteristics of CBNRM

Case studies of community-based management are increasingly well documented and involve forest and water resources, wildlife, fisheries, coastal areas, and protected areas (Colchester 1994; Borrini-Feyerband 1996; Jentoft 2000; Lane 2001; Pomeroy and others 2001; Weitzner and Manseau 2001 in in Armitage, 2005). Moreover, Western and Wright (1994) give a variety of terms of CBNRM that comprise social and community forestry, community wildlife management, cooperative or comanagement, buffer zone management, participatory multipurpose community projects, communal area management for indigenous resources, and others (Kellert et al. 2000).

In spite of important differences in practice, all those terms share certain characteristics:

- A commitment to involve community members and local institutions in the management and conservation of natural resources.
- An interest in devolving power and authority from central and/or state government to more local and often indigenous institutions and peoples.
- A desire to link and reconcile the objectives of socioeconomic development and environmental conservation and protection.
- A tendency to defend and legitimize local and/or indigenous resource and property rights.
- A belief in the desirability of including traditional values and ecological knowledge in the modern resource management.

(Kellert et al, 2000)

Other characteristics of CBNRM are provided by Armitage (2005):

1. CBNRM is generally viewed as a mechanism to address both environmental and socioeconomic goals and to balance the exploitation and conservation of valued ecosystem components (Kellert and others 2000).
2. Community-based management requires some degree of devolution of decision making power and authority over natural resources to communities and community-based organizations (Brosius and others 1998). CBNRM, therefore, involves the development of existing and/or new institutional and organizational arrangements designed to enhance local decision-making.
3. CBNRM regimes are expected to address critical issues related to the access and control over common resources by local and non-local actors. Thus, community-based resource management efforts are based on assumptions that communities and community-based organizations closely connected to natural resources are most likely to foster sustainable resources use and possess the knowledge required to do so.
4. CBNRM approaches are appealing because they link the concerns of conservationists, traditional rights advocates, and political reformers, including social equity, traditional resource access and use rights, local economic development and livelihoods, alternative forms of state–community

relationships, and the promise of environmental conservation (Brosius and others 1998; Kellert and others 2000; Barrett and others 2001). (Armitage, 2005)

As the aim of this research is to see the implementation of collaborative planning in CBNRM, some of those characteristics can be visualized into three: public participation, local institutions, and government policy or commitment to support CBNRM which will be explored more in the next section.

2.3. CBNRM and Collaborative Planning

The institutional design for collaborative planning gives attention to the *soft infrastructure* of process and practices for developing and maintaining particular strategies in specific places, and the *hard infrastructure* of the rules and resources of policy system (Healey, 2003). The former can be mirrored through public participation as the process of planning while the latter is able to be viewed from local institutions and government policy. Those three aspects are strongly related as characteristics of CBNRM.

2.3.1. Public Participation

Public participation can enhance communication and mutual interaction between the government and community members; so that potential conflict or dispute between different interests may be reduced and better managed. Through participation mechanism, community members have a place to involve in environmental decision making. The participation also generates actors involved to share information the benefits of environmental resources. Hence, community members are encouraged to participate in managing natural resources for their perpetuity life on their own initiatives (self-regulated). Here, community participation is put as an important element of planning.

Public participation is the base for collaborative planning. Pressman and Wildavsky (1994) in Healey (2006) argue that how policies were implemented continually being reinterpreted by those involved in carrying them forward. Public participation helps to build the institutional capacity of places to enable a proactive, developmental response to the conditions and relations of one place. Collaborative strategy-making processes build up institutional designs from the 'grass-roots' of the real concerns of specific stakeholders as these interact with each other in specific situations in place and time.

Woltjer (2000) also argues that process of collaboration and learning is about consensus building, discussion, debate and communicative rationality where choices are founded on that which subjects agree upon instead of technical knowledge alone. In this view, planning is aimed at making new knowledge. The interaction between stakeholders involves collectively inventing solutions as well as listening to and learning from one another (Healey, 1997).

However, there are differences levels of public participation in practice. Arnstein (1969) made a classification of degrees of participation that differentiate eight stages of citizen involvement. The highest levels are the 'real' participation. In these levels citizens have the opportunity to discuss and debate a plan or even have a collaborative decision-making power. This ladder of participation can be used by participants or planners to appraise the quality of the collaboration.

Arnstein's Ladder of Participation

8. Citizen control	Real participation
7. Delegated power	
6. Partnership	Tokenism,
5. Placation	'symbolic participation'
4. Consultation	
3. Informing	
2. Therapy	Non-participation
1. Manipulation	

Figure 2.1. Arnstein's Ladder of Participation

Source: Arnstein, S. (1969), 'A ladder of citizen participation', Journal of the American Institute of Planners, 1969, pp. 216 in Woltjer (2000).

As the main actor in CBNRM, local people need to be involved through all of the processes. This determinant relates to the issue of whether certain community members are either prohibited or actively discouraged from participating in activities associated with CBNRM. In order to make them have strong-bond to this kind of natural resource management approach, they have to be engaged from the start. Not only as the implementer of what has been decided but also has a part in decision-making process where they can voiced out their problems, jointly try to find the solutions and decide what they will do for the next processes. Arnstein's ladder will help to show what stage of participation the public do in CBNRM.

2.3.2. Local Institution

Local institution is part of resources of policy system in collaborative planning. It can act as a decision maker and a decision implementer as well. Opportunities to address conservation goals should emerge as well from efforts to foster local resource-use practices that encourage sustainable use and the conservation, rather than destruction, of natural resources in the broader landscape.

Not to mention that in CBNRM, devolution is an important thing (Shackelton et al, 2002). It aims at increasing resource user participation in NRM decisions and benefits by restructuring the power relations between central state and communities through the transfer of management authority to local-level institutions. These local institutions are varied in format and functions. There are district organizations, village committees, corporate and legal organizations, household-base and individual management, and self-initiated organizations (Shackelton et al, 2002).

In analysis chapter, local institutions will be seen from the point of view of existence, format, function, and effectiveness.

2.3.3. Government Policy

Government policy as one of systemic institutional design is important because it carries substantial power to frame the specific instances of governance activity. Moreover, as a reflection of government support for environment sustainability, some environmental policies may be the indication. The policies establish the institutional setting for natural resources management and direct actors involved within. All of the decision making process and sharing responsibilities from planning to evaluation is standardized through government policies to avoid misinterpretation among actors involved. Hence, the goals in natural resources management can be effectively achieved. In CBNRM it provides a legal standing and also means that government support managing natural resources through community. To simplify, the policies can be seen from national and local level.

Grounded on three of characteristics explained above, the performance of collaborative planning in CBNRM in Botswana and Indonesia will be assessed, as can be seen from the table below.

Table 2.1 Table of Analysis

<div>Country</div>		Botswana	Indonesia
Indicator			
Public Participation			
Local Institution			
	Exist/Inexist		
	Format		
	Function		
	Effectivity		
Government Policy			
	National		
	Local/Sectoral		
	Content		
	Other		

CHAPTER THREE

COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT IN PRACTICE

This chapter tells the experiences of Botswana and Indonesia in executing CBNRM. As explained in the previous chapter, this section will see the collaborative practice in performing CBNRM through public participation, local institutions, and government policy regarding CBNRM. The first part shows Botswana's experience and continues to Indonesia's practice in the next part.

3.1. Community-based Natural Resource Management in Botswana

Botswana is a comparatively wealthy African nation. It has been able to provide education, health and social security, and this has been important in guaranteeing a minimum level of welfare for its population. However, this country still faces the rural poverty of its community. Moreover Botswana has low population–land resource ratios and its government has taken seriously the devolution of powers to manage natural resources since the mid-1980s. This has involved CBNRM initiatives since 1990 as part of a Southern African Development Community (SADC) regional program funded by the United States Agency for International Development (USAID), focusing mainly on wildlife and tourism.



Figure 3.1.: Map of Botswana

Source: <http://en.wikipedia.org/wiki/image:Botswana-map.png>

3.1.1. Public Participation

Formal indigenous people participation of CBNRM in Botswana can be traced after a number of projects in some of the community-controlled hunting areas in Botswana, principally through the Natural Resource management Programme (NRMP) in 1990 which was a part of a Southern African Development Community (SADC) (Twyman, 2000). The project was introduced by the regional Department of Wildlife and National Parks (DWNP) as the legal institution which has responsibility to implement the projects (USAID, 2007).

In the planning program, community consultations are held by district-level DWNP staff through meetings at the village level. There are several forms of community meetings, namely workshops, committee elections and fieldtrips (Twyman, 2000). At the first stage of consultations process, a series of speeches are given. These activities include the use of posters which are translated into

local languages by village member. Both the language and images used in these meetings strongly emphasize the empowerment and participation.

During the process, well-trained DNWP staff will spend and extend many weeks when engage in community consultation in the district. In their perspective, to work effectively, and for the successfulness of program implementation, they have to obey certain project objectives and designs. Hence, from beginning they have already followed a planner-centred form of participation rather than people-centred approach.

According to Twyman (2000), it is need not be a bad thing in itself, but if this is the form of participation desired by these Government of Botswana, DNWP staff should be transparency and explicit about their views of participation and empowerment. Hence, this suggests that there are mechanisms in the planning process which implicitly give constraint to empowerment and to dictate the forms participatory in conservation.

However, in some part of Botswana, the communities had derived economic and financial benefits out of managing the hunting quotas in their own areas. They had make decisions about how they want the benefits to be distributed among the communities, decide who are the beneficiaries and develop community action plans for other investment and development options and how they are going to monitor the condition of their natural resources against extinction, misuse or any other damage.

3.1.2. Local Institution

Botswana has a long history of decentralization and the formation of CBNRM. Prior to colonialism, Botswana had established its own local institutions which had control over resource management. These locally based institutions had their

own rules which determined who had access to what resources. So, the new institution basically only continues what already been done before (Twyman, 2000).

Since the implementation of CBNRM Program in 1990, no uniform institutional structure exists for CBNRM Project in Botswana. However, Government of Botswana devolves responsibility for the Department of Wildlife and National Parks (DWNP) as lead agency to assist the program implementation. The structure is described in the **figure 3.2.** below:

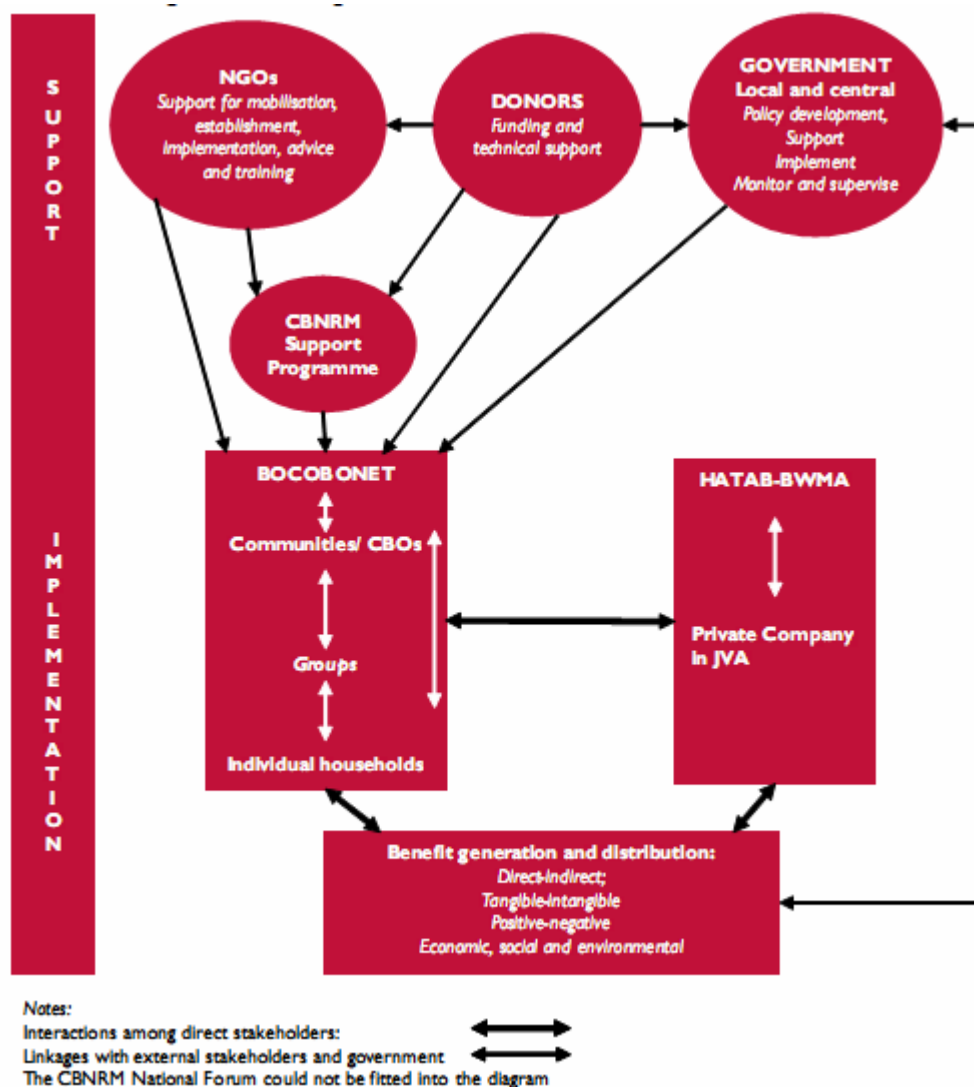


Figure 3.2. Organization structure of CBNRM in Botswana

Source: USAID (2007)

A wide range of institutions are involved in CBNRM: communities/CBOs, private sector partners, at least nine government ministries and departments and around 20 NGOs. CBOs are the heart of the CBNRM program (USAID, 2007) and the first CBO is established in 1993 (Chobe Enclave Community Trust or CECT). Some CBOs have engaged in joint ventures with commercial companies, mostly in area which has scenic panorama. CBOs put out tenders for a joint venture partner (JVP) and decide together with the Technical Advisory Committee (TAC) on the most suitable partner (usually the highest bidder).

In 1998, CBOs formed an umbrella organization—BOCOBONET—to represent their interests. The umbrella organisation BOCOBONET represents the interest of CBOs and supports them through training, advice etc. The private sector is involved as JVP and some lobby groups. The private sector largely operates on an individual, i.e. company, basis, and contributions to the broader CBNRM process are minimal. The CBNRM review recommended that the role of the private sector needs to be clarified and strengthened (Arntzen et al, 2003 cited in USAID, 2007).

To increase community participation, interest and benefits, a community-based rural development strategy is developed in 1997. The Strategy is introduced in the 2002 by Revised Rural Development Policy to promote the broadening of the scope of CBNRM projects. However, rural development strategy remains largely separate from the core CBNRM program. In 2002, UNDP and the Ministry of Agriculture started the Indigenous Vegetation project (IVP) that conduct community-based rangeland management at three sites and its intention is to demonstrate that community-based rangeland management is an alternative to ranching, which has been at the centre of livestock policies since 1975. For detail, the development of CBNRM project and movement in Botswana is presented in the following table.

Table 3.1. Development of CBNRM Project in Botswana

Year	Chronology	Number of registered NGOs
1989	Start of NRMP at DWNP. NRMP and DWNP have been instrumental in policy development; preparation of management plans for CHAs and WMAs; CBNRM pilot enterprises, and initiating an extension network to support CBOs	0
1993	First CBO and joint venture agreement concluded (CECT)	1
1995	Government promotes the CBO-JVA model for wildlife resources	4
1996	Joint venture guidelines published by NRMP-DWNP	5
1997	Community-based rural development strategy launched	10
1998	BOCOBONET was established to represent the interests of the CBOs	13
1999	NRMP ends. DWNP continues to be support CBNRM through its Community Services and Extension department. Revised Join Venture Guidelines Launch of CBNRM support program by IUCN-Botswana*.	26
2000	The National CBNRM forum was formally established and a first national meeting was held in May 2000. The Forum published the 1999/2000 CBNRM Status Report.	27
2001	The second National CBNRM Forum Meeting was held in November 2001	46
2002	Revised Rural Development Policy recognizes the role of CBNRM in rural development, and recommends community management in designated areas. Start of Indigenous Vegetation Project to pilot community-based rangeland management BOCOBNET starts an AWF funded project to support ten CBOs	
2003	CBNRM review carried out.	
2005	The CBNRM policy is still being finalized	67
Note: *IUCN-Botswana is the Country Office for IUCN - The World Conservation Union.		

Source: USAID (2007)

3.1.3. Government Policy

According to USAID (2007), Wildlife Conservation Policy, National Conservation Strategy, Tourism there is no formal policy for CBNRM in Botswana. The current CBNRM activities have emerged from several project and policy initiatives in the areas of wildlife, rangelands and rural development which is funded by USAID and Government of Botswana. However, initially, broader natural resource policy has been established Act and the Wildlife and National Parks Act are among legal frameworks which regulate the natural resource management in Botswana although they only consist of general policy objectives.

Meanwhile, Government of Botswana proposes that 20 percent of the land in Botswana should be used together as conservation and development together (Twyman, 2001). Then, in 1986 several Wildlife Management Areas (WMAs) were developed which comprise of national parks, game reserves, and forest reserve. Distribution of WMAs in Botswana is illustrated by the **figure 3.3.** below.

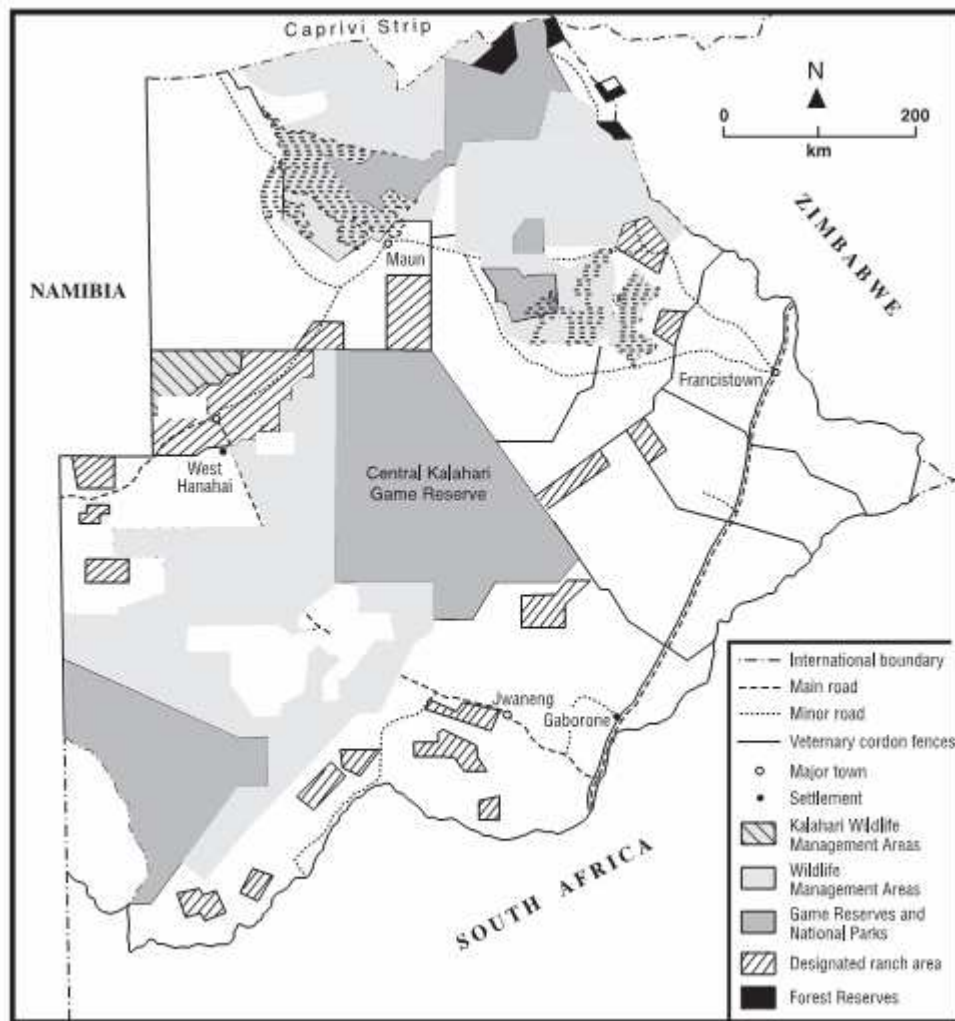


Figure 3.3. Wildlife Protection Areas (WMAs) in Botswana

(Source: Twyman, 2001)

Regulations for land and resource use were developed and existing settlements and livestock grazing were accommodated in the WMAs, in consultation with the appropriate local authorities. Since wildlife is a state resource in Botswana, citizens may only hunt if they have licenses obtained from the Department of Wildlife and National Parks, the government body with overall responsibility for wildlife resources. Portions of the country are divided into a number of Controlled Hunting Areas (CHAs), which are designated for a variety of uses including: community-controlled (for hunting, tourism, commercial or subsistence natural resource use); commercial hunting safari; and photographic safari. As commercial

hunting and photographic safaris are carried out almost entirely by private companies (many with headquarters outside the country) a number of CHAs were designated for community-controlled natural resource activities to promote the participation of local people in wildlife management and tourism (Hitchcock, 1999). Many, but not all, of these community-controlled areas fall within the boundaries of WMAs.

3.2. Community-based Natural Resource Management in Indonesia

During the New Order regime (1966-1998), concepts involving local community-based rights in Indonesia were pitted against ideas about modernity and the national interest. This state-based paradigm reached its peak in the early 1980s when the New Order state classified over 75% of the total land area as State Forest, including over 90% of the Outer Islands (CIEL, 2002). The approach ignored pre-existing local rights to millions of hectares of land, forests, coastlines and other natural resources. In what can be considered as the largest land seizure in history (Fay and Sirait 2001), the state claimed authority as the only legitimate manager of all resources and has used this authority to prioritize economic development, usually at the expense and interests of local communities. Furthermore, in the name of protecting preserved areas, government does not hesitate to chase them out from the environment they used to live.

Even with centralistic form of government, this regime started to pay attention to models of participatory and community-based natural resources management. It was started with Indonesia Coastal Resources Management Project (CRMP) which is part of the US Agency for International Development (USAID)-Indonesia National Planning and Development Board (BAPPENAS) Natural Resources Management II (NRM II) Program being implemented between 1996 and 2003 (Crawford, 1998). The pilot project is in the North Sulawesi province. Later the CRMP is carried out by Marine and Fisheries Department.

Besides coastal resources management project, Department of Forestry has also started to give chances to local communities to manage their environment as initiated in Bunaken National Park (BNP). Most of study cases below are based on the experience of those two projects in implementing CBNRM.



Figure 3.4. Map of Indonesia (insert: Sulawesi)

3.2.1. Public Participation

In North Sulawesi, one of coastal resources management project held by the government of Indonesia and US Agency for International Development (USAID) and which pertains to the management of coral reefs, participation of public was started in the selection site. A series of community training programs on coral reef monitoring and mapping were conducted where the community themselves mapped the coral condition along their village. It is proudly to say that the community generated map was statistically almost the same as data collected by professionals, as noted by Fraser (Fraser, 1998 cited in Crawford et al, 1998). In discussions for selecting the actual marine sanctuary site this map was used.

In the discussion, community was also actively involved by giving information whether the proposed location is suitable or not. They rejected one location, which technical team recommended as the best site and had the best coral cover and fish abundance, because it was often visited by bomb fishers from outside the community and was typically a resting location for fishers returning from offshore fishing trips. In return the community also proposed a site that in the end the technical team thought that it is moderately good coral cover and within sight of village.

Furthermore, in the making of ordinance, the North Sulawesi community asks to include a buffer zone around the sanctuary to prohibit the use of light boats within 100 meters of the core zone boundary because they concerned that the light boats would attract small fish out of the sanctuary. Initially, the technical team recommended that the marine sanctuary only consist of a core zone as a way of keeping management and the language in the ordinance simple. The awareness of their environment makes the community decided on a set of stricter rules than proposed by technical team and they go with it.

Meanwhile in Bunaken National Park, which has the richest marine biodiversity in the world, consists of the 89,000 hectare park provides habitat to at least 1000

species of coral reef fish from 175 families (BNPMP, 1996 cited in Erdman, 2004), public participation is initiated very early in the mid to late 1990s at the time when there was intensifying degradation of Bunaken's marine ecosystems due to ineffective management of top-down management. They were worried about their food security and livelihoods as illegal and destructive fishing incidents increased.

Community leaders of some of the park's twenty two villages realized that rather than relying on the government to manage Bunaken National Park, villagers would have to take a leadership role. In the end this process led to the formation of the Bunaken National Park Concerned Citizen's Forum (Forum Masyarakat Peduli Taman Nasional Bunaken, FMPTNB) in 2000.

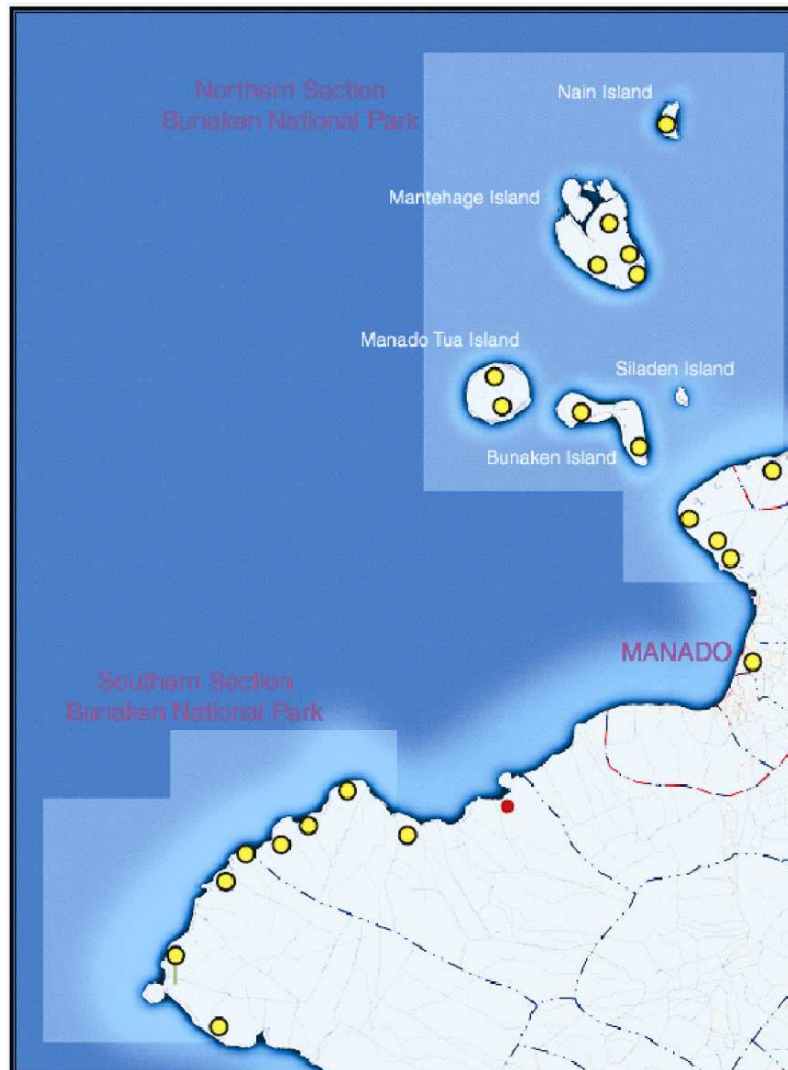


Figure 3.5. Map of Bunaken National Park

Source: Erdman, 2004

Another key activity in early 2000 for the NSWA was involvement in the park zonation revision process facilitated by the BTNB and NRM/EPIQ. Additionally, based on broad participation of local stakeholders, NSWA, FMPTNB and the Bunaken National Park Management Advisory Board (BNPMAB) set the park's conservation management agenda as well as a unique, locally-managed user fee system to finance conservation management, decentralized co-management of Bunaken National Park is worked.

Unfortunately, in Banawa-Marawola, Armitage (2007) tells that marginalized groups are not gaining a greater voice in local decision making and that, for district and regional officials, increased local autonomy actually creates an incentive to exploit natural resources, rather than forge new CBNRM models.

3.2.2. Local Institution

In Bunaken National Park, villagers and dive operators are two main actors that actively involved in rescuing damaged Bunaken. They were frustrated with the intensifying degradation of Bunaken's marine ecosystems due to ineffective management. A growing number of dive operators had invested in a rapidly expanding dive tourism sector based in BNP and saw their futures in danger unless something was to be done about the lack of management. Together they formed North Sulawesi Water sports Association (NSWA) in 1998.

By mid-1999, the group had produced a charter that was heavily weighted towards environmental concerns though voluntary minimum pricing and safety and equipment standards were also included. It is important to note that during its first year of operation, the NSWA made a sincere attempt to involve local Indonesian dive operators as much as possible and encourage them to join the association. Moreover, it also focused upon a number of other environmentally-focused initiatives, including those aimed at providing more tourism benefits to local reef-dependent communities. Following the charter, all members made a renewed commitment to actively recruit as many dive and hospitality staff from local villages as possible, and a handicrafts program was started whereby villagers from Bunaken Island were encouraged to produce reef-friendly souvenirs. Members also made a commitment to serve only reef-friendly menus (i.e., no lobster, grouper or other reef fish), and sponsored several beach cleanups, and the printing of hundreds of the coral reef conservation comic book "*Torang Pe Nyare*" for distribution to local schoolchildren.

The NSWA also assembled a nightly patrol system that relied upon members donating boats and personnel to attempt toward off the cyanide fishermen as a response of nightly attack by cyanide fishers in April 2000 (Erdmann, 2000c cited in Erdman, 2004). With the help of NRM/EPIQ, the NSWA held a series of meetings with the head of the Bunaken National Park office (BTNB) and the Water Police Chief (*PolAir*). These meetings resulted in an MOU between the NSWA, BTNB and *PolAir*, in which the NSWA agreed to fund fuel and operational costs for joint ranger/police patrols in the park. This collaborative patrol system was highly successful at stopping the rampant cyaniding in the park, led to a significantly reduced incidence of illegal fishing activities and resulted in a number of high-profile arrests and court cases.

Another key activity in early 2000 for the NSWA was involvement in the park zonation revision process facilitated by the BTNB and NRM/EPIQ. The dive operators were keen to help develop a functional multiple-use zonation plan with explicit rules and especially zones where no fishing activities are allowed (“no-take zones”).

Looking through many activities of NSWA, the NSWA refined its programs in the context of the “3 E’s” (Erdmann, 2001 cited in Erdman, 2004), described below:

1. **Employment** – this is the direct way to give alternative employment to villagers, who depend on extracting reef resources, in order to relieve pressure on Bunaken’s reef
2. **Education** – NSWA’s priority are to improve the management of the park, curb degradation and instill a sense of ownership of the reef and one of the methods is to educate dive guests, dive guides, local villagers and government officials.
3. **Enforcement** – enforcement is still considered an essential part of protecting the park’s reefs from destructive practices such as blast and cyanide fishing, as

there will always remain an economic incentive for some fishers to engage in these illegal activities.

Bunaken villagers which are unified in The Bunaken National Park Concerned Citizen's Forum (*Forum Masyarakat Peduli Taman Nasional Bunaken*, FMPTNB) are another active local institution in managing BNP. Initially, this institution is supported by local churches and mosques to develop appropriate conservation awareness materials for park villagers.

This institution also provides information to the community via village information billboard to publicize the FMPTNB, the BNPMAB, and Bunaken National Park in general. Additionally, FMPTNB members have worked with NRM III's Coastal Livelihoods team to provide training to park village women in the production of coconut charcoal and energy-efficient clay stoves, a program that has reduce pressure on mangroves for firewood harvesting while simultaneously taking advantage of a waste product (coconut shell) and improving villager health by eliminating smoke from cooking fires in houses. Finally, FMPTNB members are assisting the Bunaken Volunteers Program in developing a marine conservation education program aimed at local primary schools, introducing the parks' young inhabitants to conservation and sustainable use concepts, while also taking them directly to the reefs and intertidal mangroves to snorkel and develop direct appreciation of these ecosystems.

The detail of development of collaborative management of BNP is shown in the table below.

Table 3.2.: Chronology of events in the development of collaborative management of Bunaken National Park

YEAR	MANAGEMENT DEVELOPMENT
1970's	Local divers Dr. Hanny Batuna, Loky Herlambang and Ricky Lasut "discover" Bunaken's fantastic reefs and begin planning for dive tourism development
1980	Bunaken Island "marine tourism park" officially declared a Tourism Object of Manado (SK Gubernur Sulut No. 224/1980). Dive tourism in its infancy
1984	Area included in marine tourism park expanded to include southern Arakan-Wowontulap mainland (SK Gubernur Sulut No. 201/1984)
1986	Bunaken and Manado Tua Islands and northern and southern mainland sections gazetted as strict nature reserve by Ministry of Forestry (SK Menhut No. 328/Kpts-II/86)
1989	Ministry of Forestry gazettes area including Bunaken, Manado Tua, Siladen, Mantehage and Nain Islands and northern and southern mainland sections as national park (SK Menhut No. 444/Menhut-II/89)
1991	Bunaken is officially declared Indonesia's first national marine park (SK Menteri Kehutanan No. 730/Kpts-II/91)
1993	USAID's NRMP project begins, with goal of developing 25 year management plan for Bunaken National Park in a participatory manner
1996	NRMP closes with the publication of Bunaken National Park Management Plan. Dive tourism beginning to boom, with significant foreign investment.
1997	Independent Technical Management Unit established to manage park. Ministry of Forestry issues official zonation system for Bunaken that is different from that published in 25-year management plan (SK Dirjen PHPA No. 147/1997)
1998	Formation of North Sulawesi Watersports Association by seven environmentally active dive operators
2000	NRM/EPIQ implements new set of co-management initiatives including participatory zonation revision and development of multistakeholder management board and decentralized user fee system. NSWA signs MOU with Bunaken park office and North Sulawesi water police for routine joint patrols, funded by voluntary diver fees. Bunaken Concerned Citizen's Forum is created by local stakeholders in October, multistakeholder BNPMAB is sworn in by Minister of Forestry (SK Gubernur Sulut No. 233/2000) and entrance fee system is proscribed in provincial law in December (PERDA SULUT No. 14/2000). Bunaken Island finalizes its revised zonation plan in December
2001	Entrance fee system is implemented in March. Executive Secretariat of BNPMAB is recruited and Bunaken joint villager/ranger/water police patrol system is developed.
2002	Entrance fee for foreign guests is doubled with strong support of tourism community (PERDA SULUT No. 9/2002). BNPMAB completes its first annual workplan and budget, publishes evaluation of its first year of operation, and finalizes its charter. Institutional development plan completed for BNPMAB. Manado Tua and Mantehage Islands finalize their revised zonation plans. Ministry of Forestry's Dept. of Nature Conservation formally recognizes BNP's co-mgmt system as a model for all Indonesian National Parks (Surat Dirjen PHKA 1633/N/KK.6.02)
2003	Executive Director of BNPMAB is hired and NRM III begins a 2 year process of institutional strengthening for BNPMAB. Siladen Island finalizes its revised zonation plan. Southern section of Bunaken National Park (9 villages) set to finalize revised zonation plan by close of year. Bunaken Volunteers Program is developed.

Source: Crawford, 1998 cited in Erdman, 2004

It needs to be said that there are many other informal institutions or groups in Indonesia that successfully manage their environment with their own traditional knowledge. However, they cannot be brought up here. They could be because one

of these reasons: no scientific journal talks about them, no CBNRM projects been done at those places, and less awareness of government to preserve them.

3.2.3. Government Policy

Indonesia is blessed with ecological diversity from tropical rain forest to marine life. Realizing this Indonesian founding fathers set the principle basic of managing natural resource in the 1945 Constitution that earth/land, aquatic and everything in them are managed by the state and to be used for the very maximum of people's prosperity (UUD 1945, article 34). The continuing arrangements of this article will be stated in regulations. By that message, Indonesia has various kinds of regulations about natural resources management, such as:

1. Law No. 05/1960 Basic Principles of Land Regulations (*Peraturan Dasar Pokok-Pokok Agraria*, UUPA)
2. Law No. 11/1967 about Mining Basic Provision
3. Law No. 23/1997 about Environmental Management
4. Law No. 41/1999 about Forestry
5. Law No. 21/2001 about Oil and Natural Gas
6. Law No. 07/2004 about Aquatic Resources
7. Law No. 18/2004 about Horticultural
8. Law No. 32/2004 about Local Government
9. Law No. 26/2007 about Spatial Planning
10. Law No. 27/2007 about the Management of Coastal area and Small Islands

Those laws show that Indonesia's government is very concern about the management of natural resources. Unfortunately, quantity does not reflect quality. It does not guarantee the maximization of natural resources management. Those laws are very sectoral that can cause conflict of one sector to another. The rights of local communities and indigenous groups in Indonesia to actively participate in the management of resources in traditional territories are not well defined.

Nationally, there are no Indonesian policies that explicitly acknowledge the ability of community to manage the natural resources in any kind. However, for certain sector it exists. Law 41/1999 about Forestry for instance. This Law gave rights to customary communities to manage state forest lands. Many communities and local officials took this law to mean all customary communities automatically gained forest rights, even though the descendant regulations do not yet exist for its implementation even in mid-2005 (Wollenbergh, 2006).

Law 32 (2004) on regional autonomy has the potential to facilitate the development of innovative CBNRM regimes. However it still provides only a rough framework for shifting management regimes from their historically centralized orientation, rather than providing a basis for clarifying historical land use, occupancy, and property rights, or specific mechanisms for resource control and distribution.

In the case of Bunaken National Park which is declared as a National Park in 1991 by Ministry of Forestry, the success of local initiatives in managing it has encouraged central government to local government of North Sulawesi to support the actions by providing regulations. The Minister of Forestry (through Decree of Governor of North Sulawesi admit the multi-stakeholder of BPNMAB. Moreover, the deficit of governmental funds to operationalize BNP makes the government agree to support the entrance fee system for financing Bunaken's conservation and management through North Sulawesi local law (*Peraturan Daerah, Perda*) No. 14/2000. Furthermore, through Letter of Director General of PHKA 1633/N/KK.6.02 Ministry of Forestry's Department of Nature Conservation formally recognizes BNP's co-management system as a model for all Indonesian National Parks. Moreover, an important in the management of Bunaken National Park, provincial and local government agencies strongly refused the central government's claim to have the authority to manage Bunaken National Park and resisted early attempts toward collaborative management.

The case of Banawa-Marawola region in North Sulawesi tells a different story. There are no organizations or government initiatives actively promoting parks, protected areas or other exclusionary zones.

The experience of CBNRM in Indonesia shows some success story while others fails. The elements of collaborative perspective give influences in performing CBNRM. Deeper analysis is carried out in chapter four.

CHAPTER FOUR

ANALYSIS

This chapter discusses the comparison on CBNRM performance in Botswana and Indonesia from collaborative planning perspective which has been elaborated in the previous chapter. It starts with the comparison of public participation, local institutions, and government policy and closes with factors influencing CBNRM performance.

4.1. Collaborative Planning Perspective in CBNRM Performance

4.1.1. Public Participation

According to Arnstein's Ladder, public participation in part of Botswana region can be classified as the real participation whereas the community make decisions about how they want the benefits to be distributed among the communities, decide who are the beneficiaries and develop community action plans for other investment and development options and how they are going to monitor the condition of their natural resources against extinction, misuse or any other damage. At this stage, community has the control which has been delegated by the country.

However, in some part, this participation seems to be pseudo-participation as in Arnstein's Ladder is called 'symbolic participation or 'tokenism'. The government consults the community for some decision (i.e. regulations for land and resource use, existing settlements and livestock grazing that are accommodated in the WMAs. Even at some points, there was no public participation. For example, in the planning program, community consultations are held by district-level DWNP staff through meetings at the village level. There are several forms of community meetings, namely workshops, committee elections and fieldtrips (Twyman, 2000). At the first stage of consultations process, a series

of speeches are given. These activities include the use of posters which are translated into local languages by village member. Both the language and images used in these meetings strongly emphasize the empowerment and participation. In this stage, there is manipulation in order to merely seek support for project. Participation here is only seen from the gathering of community not by their capacity to be involved in decision making process. DNWP staff should be transparent and explicit about their views of participation and empowerment. Hence, this suggests that there are mechanisms in the planning process which implicitly give constraint to empowerment and to dictate the forms participatory in conservation.

It's not too different from Indonesia's experiences. In some areas, public gain full or real participation where they can actively voiced out their thought, as in the case of community in North Sulawesi in determining site location of the project and additional clausal for buffer zone in the ordinance. Meanwhile, Bunaken community is also experiencing real participation where they jointly decide what to do for the BNP, zonation revision process, night patrol, and entrance fee system.

The experience of Bonawa-Marawola, however, is not a good one. While the groups that are close to the authority can get access to decision making process, the marginalized groups are not gaining a greater voice in local decision making.

4.1.2. Local Institution

It is said that what local institutions do today in Botswana are only to continue what have been done long time ago. There are many CBOs (Community-based Organizations) involved that carry out CBNRM practice. In some areas this institutions can decide something pertaining to resource utilization. These CBOs formed an umbrella organization—BOCOBONET—to represent their interests and supports them through training, advice etc.

In CBNRM practice in Indonesia it can be seen that there are formal and informal institutions as part of CBNRM actors. In the case of North Maluku in BNP there are two active local institutions that together perform CBNRM. They are initially formed by the community and in the end they are formalized. Not only they participate in managing the operational of BNP, but they also empower, educate, and employ the community. In addition they enforce sanction to protect the park's reef.

4.1.3. Government Policy

For this indicator, Botswana and Indonesia share the same line. They do not have specific regulations at the national level as an umbrella to ensure the effectiveness of CBNRM. As in Botswana, just like it mentioned by USAID there is no formal policy for CBNRM in Botswana. The current CBNRM activities have emerged from several project and policy initiatives in the areas of wildlife, rangelands and rural development which is funded by USAID and Government of Botswana. It has to be mentioned that even though Botswana does not have CBNRM Law, it has the National CBNRM Forum. Initially broader natural resource policy has been established. The Wildlife and National Parks Act is among legal framework which regulate the natural resource management in Botswana although they only consist of general policy objectives.

Moreover, the government of Botswana also proposes that 20 percent of the land in Botswana should be used together as conservation and development together (Twyman, 2000; Twyman, 2001). Then, in 1986 several Wildlife Management Areas (WMAs) were developed which comprise of national parks, game reserves, and forest reserve. For this purpose, the government through Department of Wildlife and National Parks set the quota and provides the license for hunting game.

In the mean time, nationally, Indonesia also does not have specific law of CBNRM. The Government provides many regulations of natural resource management. Unfortunately they are sectoral (there are law for forestry, for fisheries, etc) and in the implementation can cause conflicts for one another due to realm overlapping. The rights of local communities and indigenous groups in Indonesia to actively participate in the management of resources in traditional territories are not well defined

Fortunately as the bright side, there is Law 41/1999 about Forestry for instance. This Law gave rights to customary communities to manage state forest lands. Many communities and local officials took this law to mean all customary communities automatically gained forest rights, even though the descendant regulations do not yet exist for its implementation even in mid-2005 (Wollenbergh, 2006). In the case of BNP, the Ministry of Forestry has shown its support by providing some supporting regulations.

In this decentralization era, Law 32 (2004) on regional autonomy has the potential to facilitate the development of innovative CBNRM regimes. However it still provides only a rough framework for shifting management regimes from their historically centralized orientation, rather than providing a basis for clarifying historical land use, occupancy, and property rights, or specific mechanisms for resource control and distribution.

Besides per sectoral, there are local regulations as well that can give power for CBNRM practice in Indonesian regions. As the nearest authority, local government can support its community in managing environment as what local government of North Maluku did to BNP.

In short, the comparison of the implementation of collaborative planning perspective in CBNRM practice in Botswana and Indonesia can be seen in the following table.

**Table 4.1. Collaborative Planning Perspective in CBNRM Practice:
Comparison of Botswana and Indonesia**

Country		Botswana	Indonesia
Indicator			
Public Participation		Real Participation; Tokenism; Non-participation	Real Participation; Non-participation
Local Institution			
	Exist/Inexist	Exist	Exist
	Format	Formal	Formal, Informal
	Function	Decide something pertaining to resource utilization	Employment, Education, Enforcement, Empowerment
	Effectivity	Effective	Effective
Government Policy			
	National	Inexist	Inexist
	Local/Sectoral	Sectoral	Local and Sectoral
	Content	Regulations for land and resource; hunting licences, quota setting	Entrance fee; zonation plan; supporting multi- stakeholders, sectoral natural resource management
	Other	CBNRM policy is in process	

4.2. Factors of Success and Failure of CBNRM: Collaborative Planning Point of View

From both cases, it can be said that Botswana and Indonesia almost have the same experience of the implementation of collaborative planning perspective in CBNRM. They experienced real participation but also have ever been in non-participation stage. Moreover they have local institutions to carry out CBNRM which are run effectively. Finally, they do not have government policies that

support CBNRM, although have some sectoral and local policy which are in line with CBNRM.

At this point I can say that Botswana nationally is more success than Indonesia. Even though, at 2005, it is still trying to finalize CBNRM policy, Botswana has national CBNRM forum and clear organization structure of CBNRM. To increase community participation, interest and benefits, a community-based rural development strategy is developed in 1997. The Strategy is introduced in 2002 by Revised Rural Development Policy to promote the broadening of the scope of CBNRM projects. In essence the government of Botswana highly support for CBNRM in this country. The manipulation and tokenism stage of participation in some areas, to me, is only part of personal mistakes of local government. Furthermore, the community has BOCOBONET to further represent its interest.

As for Indonesian case, besides in the hands of local community and institutions, the ball is also has to be played well by local governments. They have part of authority, even full authority in environmental management, to empower their communities in managing environment and socio economic as well. They also have capacities and capabilities to ask central government to hold up their activities, whether in policies or in funds. The success story of Bunaken National Park somehow tells us that local government support has a huge role in implementing CBNRM successfully.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

This chapter consists of concluding remarks based on discussions in previous chapters. It starts by answering research questions and closes by giving some recommendations in implementing CBNRM.

5.1. Conclusion

Community-based Natural Resources Management (CBNRM) is an approach to promote better resource management outcomes with the full participation of communities and resource users in decision-making activities, and the incorporation of local institutions, customary practices, and the knowledge systems in management, regulatory, and enforcement processes.

The concept involves a process whereby local people and communities organize themselves and play a central role in identifying their resources and their development priorities. They also involve in the implementation of natural resources management activities due to the communities as a foundation in strategic process. The process starts with the identification of needs and local capacities by involving and aligning stakeholders - both within and beyond the community - and ends with community as a focus. The emphasis on local capacities is based on the sense that local communities are better able to understand and intervene in environmental problems because they are 'closer' to both the problem and the solution.

In relations with collaborative planning perspective, diversity, social construction and localities are basic elements of CBNRM. They give power for it to operate in terms of place-based, using local knowledge and empower local people. Hence, collaborative concept is relevant to be adopted for CBNRM. Moreover, the

characteristics of CBNRM itself contain the soft and hard infrastructure of institutional design in collaborative perspective: public participation, local institution, and government policy. The first two will empower community and the last has a role as guidelines the implementation of CBNRM.

From the study cases of Botswana and Indonesia, Botswana can be said to be more success in terms of having national CBNRM forum and clear organization structure of CBNRM. In 2005, the government was trying to finalize its policy on CBNRM, means that it already has the draft. Furthermore, to increase community participation, interest and benefits, a community-based rural development strategy is developed in 1997. The Strategy is introduced in 2002 by Revised Rural Development Policy to promote the broadening of the scope of CBNRM projects. In essence the government of Botswana highly support for CBNRM in this country.

In terms of public participation, Botswana and Indonesia share almost the same experience. There are some communities in both countries that get full participation in managing their environment, while others can only have symbolic participation or even manipulation stage.

In other indicator CBNRM project in Botswana and Indonesia show that local institutions exist in the project. They actively and effectively involved in the operationalization of the project as they also, in the case of Indonesia, empower, educate, and employ the community. In addition they enforce sanction to protect the park's reef.

For the last indicator, government policy, both Botswana and Indonesia do not have special law concerning CBNRM. The current CBNRM activities in Botswana have emerged from several project and policy initiatives in the areas of wildlife, rangelands and rural development which is funded by USAID and Government of Botswana. Even though the government of Botswana has not set a

CBNRM policy, it already launched some regulations that support the natural resource management by community. The Wildlife and National Parks Act is among legal framework which regulate the natural resource management in Botswana although they only consist of general policy objectives.

In the mean time, the government of Indonesia provides many regulations of natural resource management. Unfortunately they are sectoral (there are law for forestry, for fisheries, etc) and in the implementation can cause conflicts for one another due to realm overlapping. The rights of local communities and indigenous groups in Indonesia to actively participate in the management of resources in traditional territories are not well defined. Fortunately as the bright side, there is Law 41/1999 about Forestry that gave rights to customary communities to manage state forest lands. In the case of BNP, the Ministry of Forestry has shown its support by providing some supporting regulations. Besides per sectoral, there are local regulations as well that can give power for CBNRM practice in Indonesian regions. As the nearest authority, local government can support its community in managing environment as what local government of North Maluku did to BNP.

5.2. Recommendation

To be successful in implementing CBNRM, we have to remember to include all actors since this concept applied in networks. Community, national government, local government, private, and NGOs need to work together, exchanging information and support in knowledge and fund. Moreover, communities have to be strengthened by giving them chances to manage their environment. In order to do this, government can provide them with information, fund and training to empower them as an institution.

Authority of communities, in essence of the extent to which a government has granted to communities the legal right to manage local natural resources, is also a strong point. The right of communities to manage natural resources, and their

responsibilities in doing so, has to be worked out with local and central governments. Communities must also be able to enforce resource use among their own members, and the exclusion of nonmembers, or of stakeholders who are not part of the resource management plan or agreement.

Another important point is the linkage to national policy process, efficiency of linkages and relevance of national policies (USAID, 2001). It is to the extent to which a CBNRM initiative can be linked to various stages of the national policy process. As noted by Successful CBNRM activities must be both horizontally and vertically integrated. Horizontal integration refers to relationships established between a community and other communities, local traditional or government authorities, or local private sector operators. Vertical integration refers to the linkages between local initiatives and various elements of the legal, political and policy apparatus at higher levels. These may include provincial and national governments, national environmental action plans and policies, and macroeconomic policies (USAID, 2001).

And finally, CBNRM objectives cannot emphasize to ecological or sustainable environment only. It has to be balanced with other objective that is socioeconomic side. It is because most of local communities live by their surrounding environment. People may want to manage the environment for better production (socio-economic) or to prevent the effects of its deterioration (ecological). They will only manage the environment if they consider the benefit to be worth the cost and if they have the means to meet these costs. As proposed by Murphree (1993):

“People seek to manage the environment when the benefits of management are perceived to exceed its cost”.

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