EXPLORING THE CAPACITY DEVELOPMENT OF SEA IN INDONESIA
CASE STUDY: SEA IN BANTEN PROVINCE

THESIS

A thesis submitted in partial fulfillment of the requirements for
Master Degree from Institut Teknologi Bandung and
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by:
M. Endin Tajuddin
ITB 25411046
RUG S2286270

Supervisors:
Dr. Femke Niekerk (Rijks*universiteit* of Groningen)
Djoko Santoso Abi Suroso, Ph. D (Institut Teknologi Bandung)

DOUBLE MASTER DEGREE PROGRAM

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INFRASTRUCTURE MANAGEMENT
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POLICY DEVELOPMENT
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ENVIRONMENTAL AND INFRASTRUCTURE PLANNING
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Approved
Supervisors
Date: August 2013

Supervisor RUG	**Supervisor ITB**
Dr. Femke Niekerk	**Djoko Santoso Abi Suroso, Ph. D**

ABSTRACT

Strategic Environmental Assessment (SEA) is an instrument for evaluating environmental consequences at an early stage of decision making and it appears to complete the Environmental Impact Assessment. One of the challenges of SEA implementation is capacity development. Capacity development is the process of enhancing capacity which focuses on improvements not only on individual dimension but also on the organizational and system dimension. The conceptual model in this thesis is useful for finding the shortages of existing capacity development and also acquiring solution for improvement.

Indonesia as a developing country already implemented SEA for several years including the capacity development of SEA. However, the research on this topic is still limited. Therefore, this thesis will explore capacity development of SEA in Indonesia and using Banten Province as a case study. In addition, it discusses international experiences from The Netherlands and Macedonia as lessons-learned via possible policy transfer. The research in Indonesia and in The Netherlands was based on literature review or/and interviews with stakeholders.

The finding of this research that capacity development of SEA in Indonesia at national level is quite effective as stated by expert, staff of Ministry of Environment and SEA maker. However, vast majority of interviewees agree that it is not yet effective at the regional and local level. In addition, there are several weaknesses in the implementation such as missing monitoring system, lack of commitment and limited individual capacities of actors. Several solutions were proposed by the interviewees and it mainly emphasizes on regulation improvement and enhancing individual capacities of stakeholders. DANIDA through ESP2 Program gives also several solutions especially for strengthening the SEA influences on decision making process.

Interestingly, elevation of enhances professional development shown in the Dutch cases. For instance, independent commission for reviewing SEA (NCEA) is independent professional body for reviewing the SEA. Another example, the information centres (InfoMil) and the professional association (VVM) have significant role to enhance capacity development of SEA in the Netherlands. The main point for lessons-learned is the professionalization and institutionalization of SEA practice in government institution, independent commission and professional association. Meanwhile, the certification of expert is interesting as possible lessons-learned from Macedonia. However, it should also notice the possible barriers for policy transfer such as political, economic resources, bureaucratic, social, and cultural barriers.

Keyword: *Strategic Environmental Assessment, Capacity Development, Policy Transfer*

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PREFACE

Nowadays, regional and local levels in Indonesia implement new environmental instrument namely Strategic Environmental Assessment (SEA) as compulsory document. As a new tool, there are many people interested about it including myself. Actually, not all environmental stakeholders understand about SEA particularly in my region Banten Province. As civil servant in my region, I really concern about it and try to find an improvement by doing research. Hence, this master thesis is not only to fulfil the requirement of my master degree, but also part of my little contribution for Indonesia especially my region and institution. I wish that my research has positive input for all reader and environmental actors particularly in my region.

I realized that this thesis would not be completed without blessing from Allah SWT and support of many people. First of all, I would like to thank to Allah SWT to give me the opportunity for studying in RUG-ITB and completing my thesis. Then, I would like to show gratitude to my supervisors Dr. Femke Niekerk and Djoko Santoso Abi Suroso, Ph.D for their great supervision, suggestion, motivation and support during my thesis work. Furthermore, I would like to express my great gratitude for all lectures and staff in ITB and RUG, National Planning Board (BAPPENAS), Netherland Education Support Office (NESO), Government of Banten Province, and interviewees. Special gratitude is also for all friend in Groningen and Banten Province especially DD ITB-RUG 2011-2013.

Finally, the important thing, I would like to dedicate this Master thesis to my beloved wife Neni Khoerun Nisa, my daughter Aqila Putri Tanela and my son Naufal Yafi Dzakwan. You are my inspiration indeed. Special thanks to my big family, my parent, my parent in law, my brothers and sisters for the support and prayer.

Groningen, August 2013
M. Endin Tajuddin

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LIST OF ABBREVIATION AND ACRONYM

DANIDA ESP2	Indonesia-Denmark Environmental Support Programme, Phase 2
EIA	Environmental Impact Assessment
KLH RI	Kementerian Lingkungan Hidup Republik Indonesia (Ministry of Environment)
KLHS	Kajian Lingkungan Hidup Strategis (Indonesian SEA)
MOEPP	Ministry for Environment and Physical Planning of Macedonia
MOHA	Ministry of Home Affair (Kementerian Dalam Negeri Republik Indonesia)
NCEA	The Netherlands Commission for Environmental Assessment
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-Operation and Development
PPP	Policy, Plan, and Program
SEA	Strategic Environmental Assessment
UNDP	United Nations Development Programme
WCED	World Commission on Environment and Development

Chapter I
Introduction

A. Background

The need of sustainable development which means “achieving the needs of the present without sacrificing the ability of future generations to fulfil their own need within the limit of the natural system” (WCED, 1987) produces the environmental tools such as the environmental impact analysis (EIA). The EIA was introduced in the 1970s in international level and was based on National Environmental Policy Act (NEPA) in the US in 1969 (Fischer, 2002).However, this tool was not qualified enough to handle the environmental degradation caused by development. The reasons are various and summarized by Partidário (2003). It was relates to the decision making process and level of information. It means that decision making influence project planning and design in the beginning of the process. In addition, the decisions are inherently adaptable to more strategic levels of decision-making.

The ministry of environment of Indonesia also found the weaknesses of EIA implementation (KLH book 1, 2007). First, EIA document has low quality because most of the EIA documents prepared in a short time, with a relatively low cost (EIA plagiarism), and directed to immediately obtain the approval of the EIA. Second, EIA document less comply with the laws and regulations. Third, there are high moral hazards among certain actors. Forth, evaluations of alternatives are not carried by most of the EIA document. Lastly, EIA is only performed at the level of events or projects not on the level of strategic decision making (policy, plan, and program). Therefore, there was a need for a policy instrument to support the EIA which playing at the level of strategic decision-making like Strategic environmental assessment (SEA). SEA is a tool to integrate environmental concerns into the highest levels of decision-making.

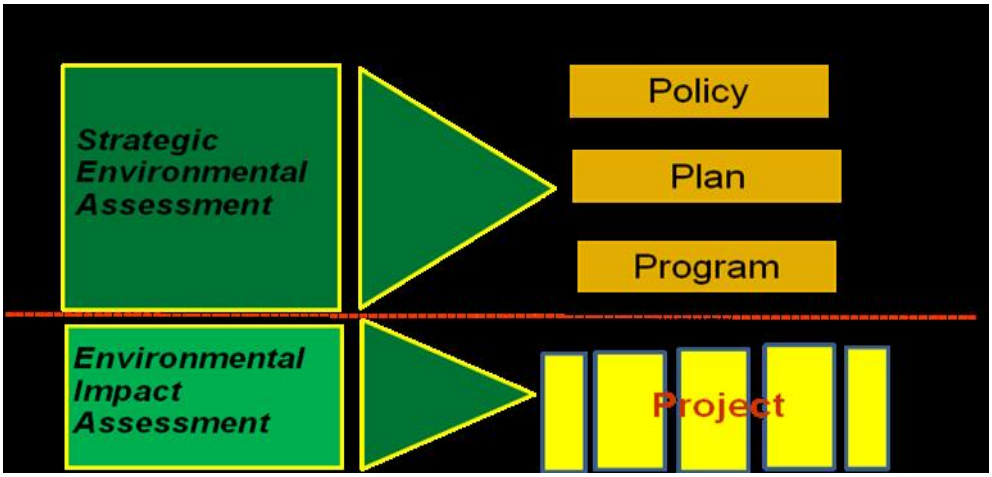


Figure 1 Difference of SEA and EIA in the decision making (OECD, 2006)

Fischer (2007) states that SEA is "A systematic, objectives-led, evidence-based, proactive and participative decision making support process for the formulation of sustainable policies, plans and programs, leading to improved governance". In addition, Therivel (2004) states several benefits of SEA which are: SEA gets in earlier before the project are approved; SEA deals with impacts that are difficult to consider at the project level; SEA promotes a better consideration of alternatives; SEA incorporates environmental and sustainability considerations in strategic decision-making; because of tiering, SEA has the potential to promote more streamlined decision-making.

Based on the phase of development and experience, SEA systems of the countries in the world can be divided into three categories (Sadler, 1996). First of all, relatively advanced is a formal, systematic process or equivalent approach, such as North America and Australia. Second, moderate provision and/or elements *is* SEA-type approaches established as a part of EIA and/or planning processes such as various industrial and developing countries. Third, EIA and planning systems are at an elementary stage because of constraints of resource and institutional such as poorer developing countries (little or no capacity).

The appropriateness of implementation of SEA in developing country contexts is in debate because there is growing evidence that EIA is not working well. The reasons for this failure are issues of lack of political and institutional will, limited skills and capacity, bureaucratic resistance, antagonism from vested interests, corruption, compartmentalised (e.g. sectoral) organisational structures and lack of clear environmental goals and objectives. These problems will appear as constraints to the introduction of SEA (Dalal-Clayton and Barry Sadler, 1999).

In addition, Alshuwaikhat (2005) state that EIA implementing in Asian country face several problem as state below:

> "In many cases, EIA has not been effective due to legislation, organizational capacity, training, environmental information, participation, diffusion of experience, donor policy and political will. In many Asian countries (e.g., Sri Lanka, Vietnam and Saudi Arabia), environmental assessment, specifically EIA, was introduced with insufficient staffing, experience and monitoring, with evaluation inadequacies and without enough baseline data. It seems that a political decision was taken without considering the technical and infrastructural aspects required to carry out assessments smoothly with proper monitoring and incremental development of the environmental assessment over time. The EIA experts in Saudi Arabia feel that a lack of transparency, public participation, unified standards and clear implementation procedures for EIA prevent it from becoming a success. Interestingly, EIAs are not publicly available in Saudi Arabia, and for this reason, there is no sharing of information among geographically adjacent projects. This hinders the public awareness process and prevents

research work from contributing to the field of environmental assessment. In Saudi Arabia, national policies and plans still remain immune to criticism."

Moreover, Momtaz in 2002 state the challenges of EIA implementation in Asia as stated below:

"In Asia, many countries give lower priority to environmental assessment, at least at the policy level, in dealing with poverty alleviation, economic growth and development and, sometimes, political stability. But in such countries, the World Bank, Asian Development Bank and other international agencies are partly forcing the respective governments to address environmental issues as part of lending and grant-issuing conditions. Sometimes, this results in the adoption of environmental considerations simply as a political decision, without the involvement of any public awareness or participation and even without clear perceptions of environmental assessment by governmental agencies."

Furthermore, Abaza (2000) states that little involvement or enthusiasm on the part of the recipient countries and largely donor driven and conducted by consultants from abroad when EIA was first used for development projects in developing countries is one of the challenges.

In addition, the enforcement of legislation was known as one of the solution for implementing and monitoring EIA (Momtaz, 2002). However, this is not easy in many of the Asian countries where corruption is extensive. Moreover, non-governmental organizations and donor agencies play a major role in monitoring the carrying out of EIA, in collaboration with Department of Environment. However, EIA is not suitable in maintaining a single standard for EIA quality in Bangladesh.

Indonesia as a developing country also has implemented SEA. The government implemented a systematic plan to introduce and institutionalize SEA in 2005 and make several books as guidance for applying SEA in 2007(KLHRI book 3, 2007). In addition, there are also ten documents which can be categorized as SEA document before the establishment of new law (KLHRI book 2, 2007).

The Minister of Environment incorporates SEA in new Act No. 32 of 2009 regarding Environmental Management and Protection. SEA based on the law is focused on the spatial planning; the long-term and mid-term development plan, the policies, plans, and/or programs which have potential impacts and/or environmental risks. Of course, there are many challenges on the implementation of SEA. It seems the challenges of implementation of SEA in Indonesia having similar challenges with the EIA. It is caused by the implementation of SEA in Indonesia using EIA-based SEA.

One of the challenges is the capacity of institution and human resources. As mention above by Momtaz (2002) and Alshuwaikhat (2005), the capacity is related

with organizational, insufficient staffing and clear perception of EA by governmental agency. Moreover, Nelson et al (2012) explain that one of main hindrance of implementation of SEA is the lack of capacities. In addition, OECD (2012) states that many developing countries lack of institutional stability and continuity to promote and sustain SEAs with their own resources. Therefore, they need to strengthen SEA monitoring and follow-up especially on capacity development.

Capacity development has been a widespread concept in international development cooperation since the late 1980s. Capacity development is defined as the process of enhancing, improving and unleashing capacity which focuses on improvements (Baser and Morgan. 2008). Capacity development is not only the improvement of individual capacity but also other aspect as mentioned by UNDP (2008) below:

> "Capacity development is much more than supporting training programmes and the use of national expertise – these are necessary and on the rise, but we must include response and support strategies for accountable leadership, investments in long-term education and learning, strengthened public systems and voice mechanisms between citizen and state and institutional reform that ensures a responsive public and private sector that manages and delivers services to those who need them most."

OECD (2006) gives the significant of capacity development for SEA. First is improving the knowledge amongst decision makers and relevant administrations regarding the potential value of SEA to development effectiveness. Second is improving institutional experience of using systematic decision-making tools such as SEA. Moreover, the result of capacity development for SEA in Macedonia produces several advantages which are more effective screening, Improved SEA regulation, Improved capacity of the ministry's SEA staff, Improved SEA awareness, More and better certified SEA experts (Schijf, 2012).

Those indicate that the capacity development is needed to implement an effective of SEA in Indonesia. Based on the definition, Indonesia government already conducts the capacity development of SEA. From the regulation aspect, Indonesia already has the law no. 32 year 2009 concerning environmental protection and management and ministerial regulation from Minister of Environment and Minister of Home affair.

In addition, Individual capacity development is carried through training both in the country and abroad. The forms of training were short course class, technical assistance and workshops. Overseas training conducted in Netherlands, German, Geneva consisting of officials from central, provincial and district town. The short

course class is given to the legislative or executive officer. The workshop was conducted by training in the form of On the Job Training and implementation of SEA practices into policies, plans and programs of regional development.

However, there is a lack of exploration on capacity development of SEA in Indonesia. Therefore, it is needed to explore the implementation of capacity development of SEA in Indonesia.

B. Research Objective

The purpose of this research is providing direction to capacity development of SEA for local and provincial governments in Indonesia. First, this research will observe the current practice of capacity development of SEA in international experiences (Netherland and Macedonia) as lesson learned. Then, this research will explore the current practice of capacity development of SEA in Indonesia and one case study on provincial level namely Banten Province. Finally, the research will provide recommendations to improve the Capacity Development of SEA in Indonesia.

C. Research Question/Problems

EIA approach was born in context of developed countries. Of course, the context is different with developing countries. Because of this context, the implementation of EIA in developing countries faces several challenges. Thus, SEA as evolution of EIA may faces similar and also new challenges. At the same time, Indonesia as a developing country also faces those problems. One of the challenges is capacity development. Therefore, from the background above, it can be identified several research questions namely:

1. What are the capacity requirements of SEA?
2. To what extent the Netherlands and Macedonia fulfill the capacity requirements of SEA?
3. To what extent Indonesia fulfill the capacity requirements of SEA?
4. How to improve capacity development of SEA in Indonesia?

D. Theoretical Framework

The research focuses on two theoretical perspectives which are capacity development and Strategic Environmental Assessment. Capacity development theories used in this study are derived from UNDP and OECD. SEA concept used in this study is the definition from Sadler and Verheem. Furthermore, it compares the implementation of capacity development of SEA in Indonesia especially in Banten Province with good practice in international experiences. The purpose is to find potential improvement for implementation of SEA in Indonesia. The theoretical framework is depicted below.

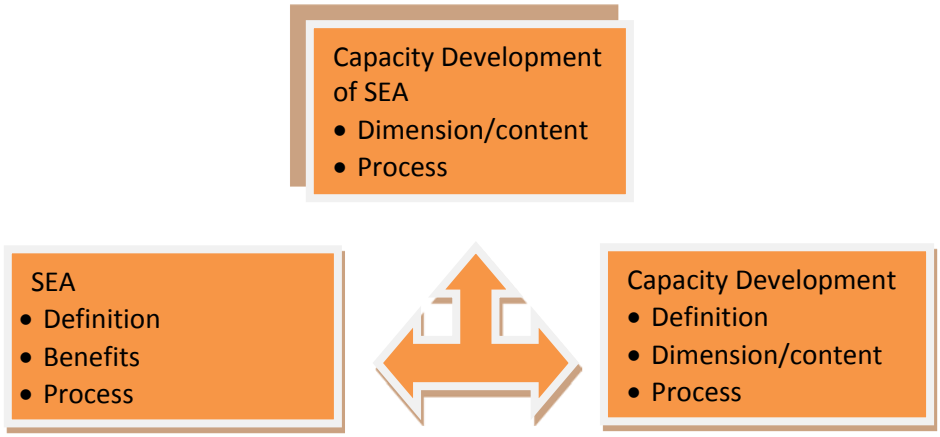


Figure 2 Theoretical Framework

E. Research Design

This research uses literature review and interview as qualitative methods. Additionally, the research compared the capacity development from international experiences and in Indonesia by using qualitative data. The interviews were conducted using structured interviewing methods. This study started from December 2012 and is completed in August 2013.

This research contains seven chapters and the structure can be seen in figure below. The content of each chapter can be depicted as follows and the picture is provided below.

Chapter 1: Introduction, this chapter consists of background, research objectives, research questions, theoretical framework, and research design.

Chapter 2: Theoretical Review, this chapter describes the concept of SEA and Capacity Development.

Chapter 3: Methodology, this chapter explores strategy of research, data collection, method of analysis, and research steps.

Chapter 4: International experiences of SEA, this chapter explains the implementation of SEA and the capacity development of SEA in the Netherlands and Macedonia to obtain the knowledge of good practices as comparison.

Chapter 5: SEA in Indonesia, this chapter describes the current implementation of SEA and the capacity development in Indonesia particularly in Banten Province.

Chapter 6: Possible Lessons-learned. This chapter compares the practices between Indonesia, the Netherlands and Macedonia. This comparison depicts what lesson can be learned and practices can be adopted.

Chapter 7: Conclusion, Reflection and Recommendation, this chapter provides conclusion, reflection and recommendations for the improvement of capacity development of SEA in Indonesia.

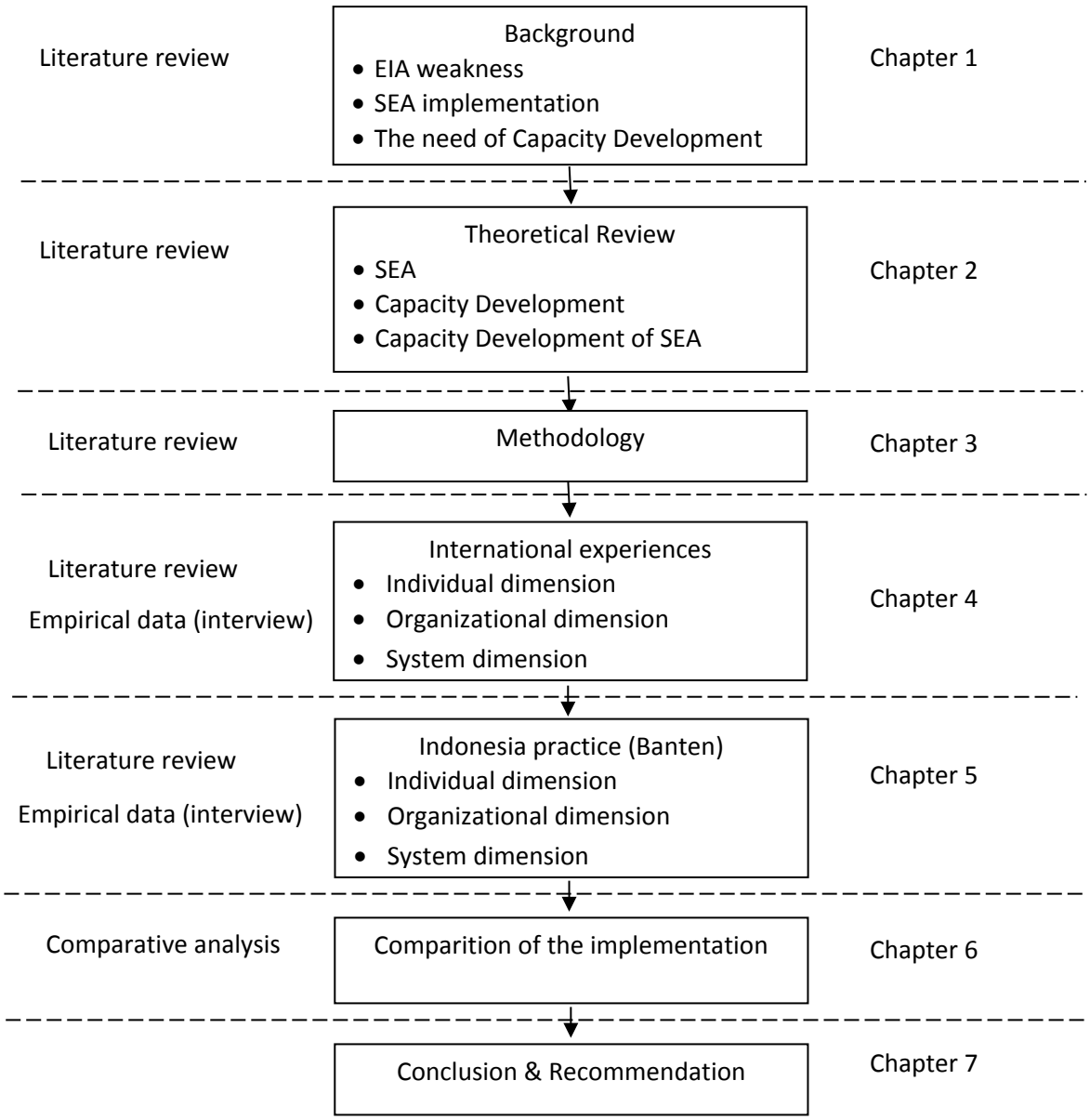


Figure 3 Research Design

Chapter 2
Theoretical Review

This chapter explores some theoretical understanding on SEA and capacity development. The first part discusses the concept of SEA. Then, it is followed by a description of capacity development in general. In addition, the third part explains the notion concerning capacity development of SEA. Finally, the last part describe about conceptual model of the research.

A. Definition of SEA

There are many definitions of SEA. Here are two definitions of SEA from Sadler & Verheem (1996) in Sadler (1998) and Fischer (2007).

> "SEA is a systematic process for evaluating the environmental consequences of proposed policy, plan or program initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations". (Sadler and Verheem(1996) in Sadler(1998)).

> “SEA is a systematic, objectives-led, evidence-based, proactive and participative decision making support process for the formulation of sustainable policies, plans and programs, leading to improved governance”.(Fischer, 2007).

In addition, Therivel (2004) and Fischer (2007) state several benefits of SEA. First, SEA gets in earlier before the project is approved. Second, SEA deals with impacts that are difficult to consider at the project level and strengthens project EIA, it also increases the efficiency. Third, SEA promotes a better consideration of alternatives leading to more effective and less time-consuming decision-making and implementation. Fourth, SEA incorporates sustainable development considerations in strategic decision-making. Fifth, SEA has the potential to promote more streamlined decision-making. Finally, SEA enables more effective involvement in strategic decision-making, creating knowledge at low costs.

Moreover, Dalal-Clayton and Sadler (1999) and Fischer (2007) describe process of SEA according on EIA-based approach. There are several steps. First, screening stage is used to decide if SEA is needed or not. Second, scooping stage determines extent (geographic, temporal and thematic) and level of detail of the assessment, the information in SEA and the environmental report. Third, analysis, environmental report and review stage is very important of SEA process. The analysis should incorporate prediction and evaluation of possible impacts. Fourth, Decision-making, approval and accountability stage is an integration of SEA into decision-making for

meaningful and beneficial SEA. Fifth, follow-up and monitoring/ post-decision stage is a step to improve the effectiveness of the measures and action proposed in PPPs. Lastly is consultation, participation, communication and reporting.

In this research, I use the definition of SEA from Sadler and Verheem. SEA is for producing decision making which consider the environmental, economic and social aspects in policies, plan and program. In addition, SEA is the complement of EIA. SEA is focus on the decision making activities on the policies, plan and program level. While, EIA is more focus on decision making at the project level.

B. Capacity Development

There are many definitions of capacity development. For instance, capacity development comprises changes in the ability of a human system to perform, sustain itself and self-renew over time (Ubels et all, 2010). Moreover, capacity development not only includes the acquisition of resources, but must also include learning how to deploy and integrate these resources to accomplish complex tasks in line with its goals and strategy (Mackay et all, 2002). Meanwhile, Baser and Morgan (2008) explains capacity development "as the process of enhancing, improving and unleashing capacity; it is a form of change which focuses on improvements".

In addition, Organisation for Economic Co-Operation and Development (OECD, 2006) state that Capacity Development is "the process by which individuals, groups and organizations, institutions and countries develop, enhance and organize their systems, resources and knowledge; all reflected in their abilities, individually and collectively, to perform functions, solve problems and achieve objectives". Furthermore, United Nations Development Programme (UNDP, 2008) defines Capacity Development as "the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time".

The term of capacity development and capacity building seem very similar. Those terms are related but have different meaning. According to UNDP (2008, the term of capacity development is more comprehensive than capacity building. The capacity building is focus on the support for initial stages of building or creating capacities. In addition, it assumes that there are no existing capacities. On the other hand, capacity development is process for creating and building capacities and their subsequent use, management and retention. It assumes that there are existing capacities and support to enhance those capacities.

Referring to UNDP (2008), there are three level of capacity development namely enabling environment, organizational level, and individual level. The summary of the three levels is drawn on the picture below. In other hand, the OECD (2006) has different term of level of capacity development for SEA which adapted

from Dusik et all (2004). They use terms namely system, institutional, and human level.

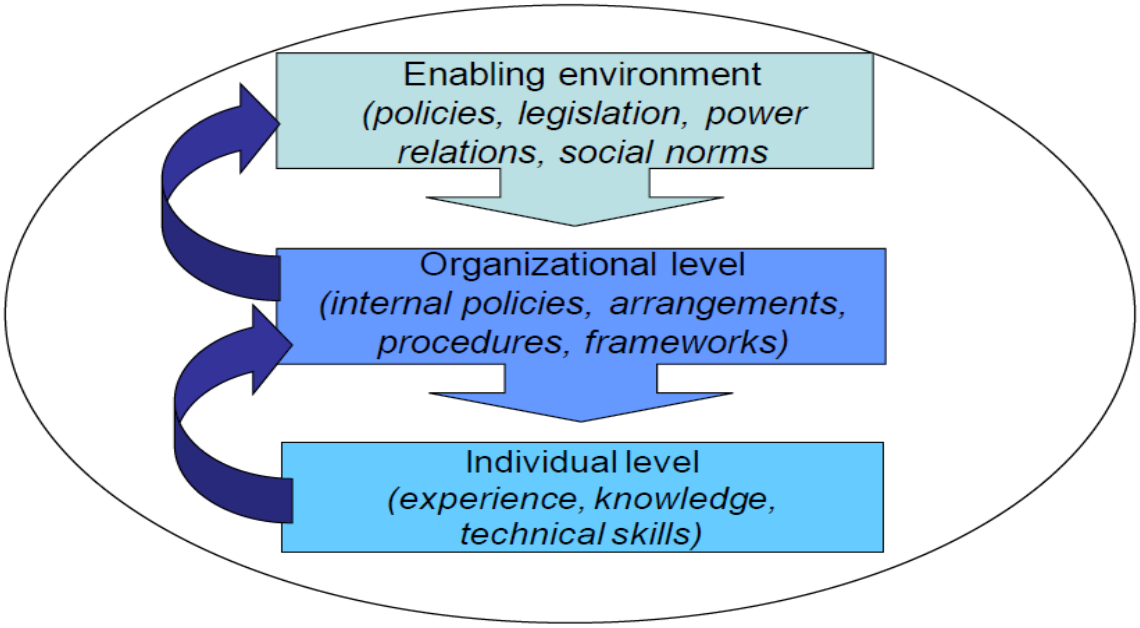


Figure 4 Levels of capacity: a systemic approach (UNDP, 2008)

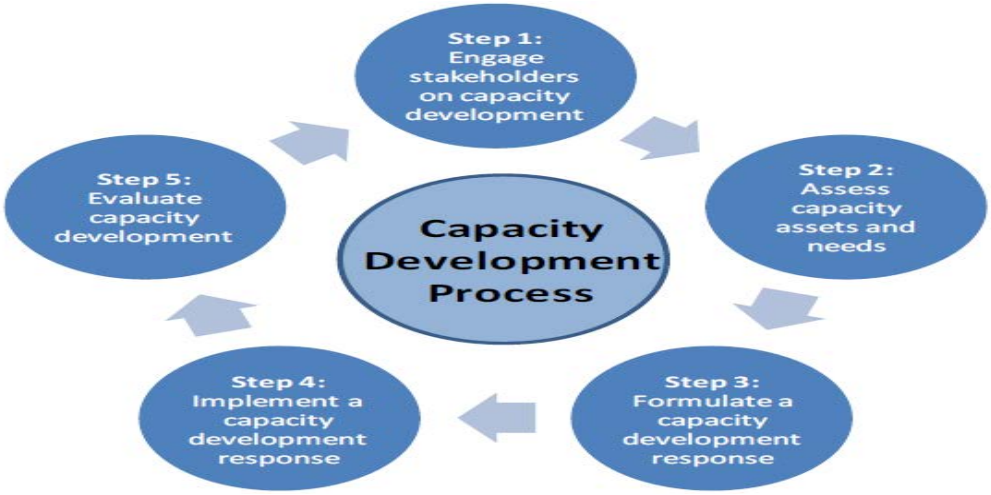


Figure 5 Capacity Development Process (UNDP, 2008)

The capacity development steps are consisting of five elements (UNDP, 2008). Those are engaging stakeholders on capacity development; assessing capacity assets and needs; formulating a capacity development response; implementing a capacity development response; and evaluating capacity development. In the context of this research, I assume that those steps are implemented for every level of capacity development.

Furthermore, UNDP (2008) explain four core issues in the capacity development as the driver of change in the capacity namely institutional arrangement, leadership, knowledge and accountability. Those issues are reinforcing each other and making the capacity development more effective if combine together.

Based on Fowler and Ubel (2010) there are two major perspectives on capacity development. First, Allan Kaplan and his colleagues from the Community Development Resource Association describe capacity development via six inter-related elements. Those elements are context and conceptual framework, vision, strategy, culture, structure, skills, and material resources (Kaplan, 1999). Second, Netherlands-based European Centre for Development Policy Management developed the 'five capabilities' (5Cs) framework for both understanding and evaluating capacity. Those capabilities are capability to commit and act, capability to deliver on development objectives, capability to relate, capability to adapt and self-renew, and capability to maintain coherence (Baser and Morgan, 2008).

It is clear that capacity development definitions are very broad and diverse. In this research, I conclude that capacity development is the effort to improve the capability of individual, organization and system to obtain the objective by utilizing available resources. Therefore, I focus on those three dimensions in order to measures the capacity development in Indonesia.

C. Capacity Development of SEA

OECD (2006) explains several important principles of effective capacity development of SEA. First is Development outcome (result) orientation. The final goal of capacity development for SEA is better decisions that result in contributions to development impact (*e.g.* poverty reduction) not only good quality document of SEA. System orientation is the second principle. Capacity development addresses organizations as well as interacting systems such as societies; it is not restricted to skills of single individuals (*e.g.* including stakeholders and NGOs).

Then, learning orientation is essential. Capacity development should address the capabilities to continuously improve the decision making and implementation process, and implies adopting mechanisms to learn from reality check monitoring and evaluation as well as from previous experiences. Trust-building is the last principle. All participants, especially decision makers, involved in an SEA process should be able to gain confidence in the potentials and benefits of SEA-supported decisions.

Moreover, OECD (2006) provides several mechanisms for developing capacities of SEA which stated below. Initially, technical training on SEA principles, potentials and methods is a direct way to enhance country capacity for carrying out SEA. Then, it is needed to raise awareness through workshops and training on

potentials and principles of SEA for well informed decision making. Next, it need to support the institutionalization of SEA process such as establishing appropriate regulatory frameworks, clarifying responsibilities, supplying information or knowledge dissemination, Institutionalizing networks and dialogue bodies. Moreover, the monitoring and evaluation systems are important for verifying the intended result of previous PPP decisions. In addition, Networking for sharing experiences allows multiple stakeholders to learn from previous SEA cases and decisions.

Capacity development level for SEA is provided by OECD (2006) which adapted from Dusik et all (2004). First, System capacity means the framework within institution and individual operate. The objectives are developing legislative and regulatory, improve inter-institutional coordination and create enabling environment for entire system. The examples of the intervention are policy and regulatory reform and monitoring. Second, institutional level is the ability of an organization to operate within the given system. The examples of this dimension are internal management guidelines and improved working condition. Third, human dimension is the skill and expertise of individual person and motivation. It focuses on develops skill, changes attitude and behaviour, and supports long-term motivation and commitment.

D. Conceptual model

From theoretical review, there are three dimension of capacity development. The UNDP distinguishes enabling environment, organizational, and individual dimension. On the other hand, The OECD distinguishes system, institutional and human dimension. In this research, I use the term of system capacity for the first and organizational for the second, and individual for the third dimension. The effectiveness of the capacity development will be attained if those three levels are addressed effectively. I draw a conceptual model for my research based on those levels and based on literature review.

1. System dimension of capacity development should include
   a. Policy and regulation,

      The support from government for the implementation of SEA is very important. The support can be political support for making the policy, regulation and the derivatives. This political support must come from the executive and legislative authorities.

   b. Guidelines

      The guideline can be a book or web portal to ensure that all people have same opportunity to improve their knowledge and to monitor SEA process. The guidelines also provide the direction of interaction between key players in SEA process. It means that the role and responsibility for managing SEA is

clear. Generally, there are several departments or ministries which have responsibility for managing environmental issues. Determining who is responsible for SEA or sharing roles and responsibility among institution is very important to avoid conflict and ambiguity.

c. Monitoring system

This system is more a reflection of the implementation of SEA. The monitoring covers both SEA making process and achieving intended objective of SEA. The monitoring not only conducted by government but also by all stakeholders in reflective ways. This step is important to improve the implementation and obtain the long term objective and sustainable vision.

d. Procedures

The implementation of SEA needs a good quality of procedure. It will help the staff and stakeholder to make good quality of SEA.

2. Organizational dimension of capacity development should include
   a. Financial and accountability

      Usually, SEA is introduced in developing country by donor organization or state. Then, the financial support is only for one project. After the completion of project, the financial support is stopped and delivered to recipient government. However, there are some governments that are not willing to provide financial support. SEA needed continuity of financial support from donor or governments receiving aid. In addition, the financial basis needs also accountability to increases transparency and helps reduce the public distrust.

   b. Structure and working condition

      The organization for managing SEA should have clear structure to divide the task and sufficient human resources to conduct the task. In addition, the working condition means the tool for improving the performance of the staff. It is very important to motivate the staff.

3. Individual dimension of capacity development should include :
   a. Training and workshop

      It is one way to increase capacity development for individual level. The transfer of knowledge from the trainee to other people is expected and more people will know the important of SEA and practice it in the development process. In addition, it is important to expand participant of the training. It means not only the professional and civil servant but also the

NGO, decision maker, politician and society. The purpose is to make SEA having great influences on the decision making process.

b. Leadership or Front runner

It is a person or organization that has high commitment to support the continuity of SEA program and obtain the goal of SEA. This person will influence, motivate people, and use his/her resources to campaign and to obtain the goal of SEA. Leadership is refers to the position of authority and the front runner is in the contrary.

c. Expertise and Professional development

Expertise is needed for making the good quality of SEA document and it implementations. However, the economic principle have crucial role when the number of experts is insufficient. The limited number of experts tend to put high tariffs to make SEA. Hence, SEA document preparation becomes so expensive and less effective and efficient. The sufficient expertise is needed for reducing this kind of cost. More and more experts create competition so hopefully SEA document preparation cost becomes more affordable. The purpose of the development is to increase the experiences on SEA practice. The experience can be obtained from various ways such as network and apprentice.

Those three dimensions of capacities are completing each other and must be implemented simultaneously for improving effectiveness of capacity development. It can be drawn as picture below.

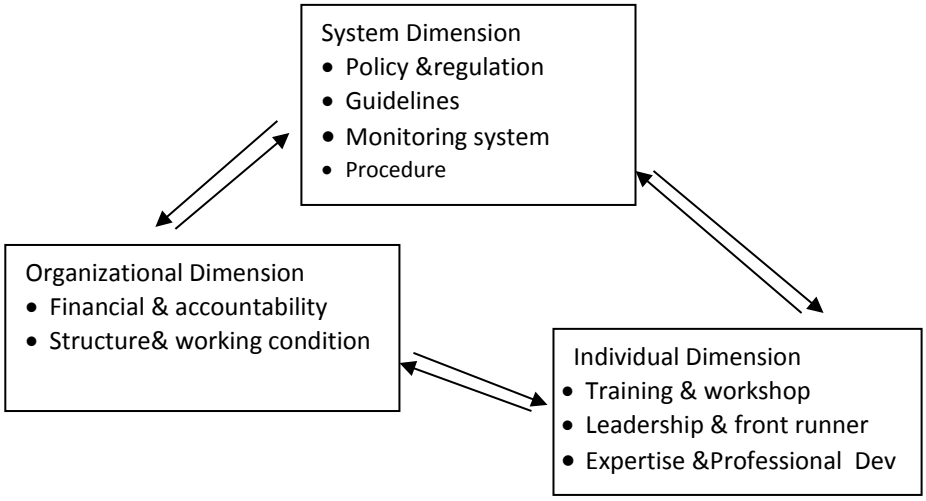


Figure 6 Conceptual Model of Capacity for SEA on three Dimensions

The conceptual model for process of capacity development in this research uses the model from UNDP as picture below refers to previous picture.

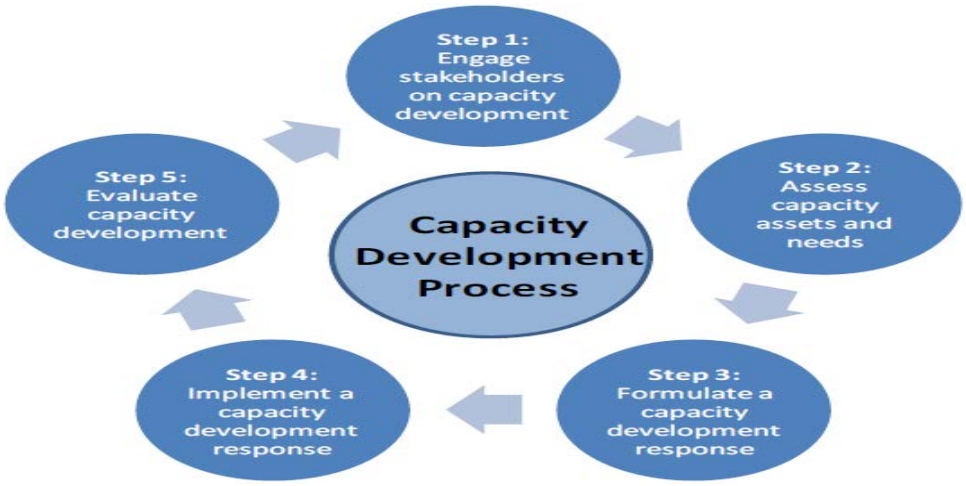


Figure 7.Conceptual Model of process of capacity for SEA (adopted form UNDP, 2008)

Chapter 3
Research Methodology

This chapter describes the methodology for exploring the capacity development of SEA from international experiences and Indonesia particularly Banten Province. The first part discusses about the research strategy. Then, it is followed by sub chapter concerning data collection. Furthermore, the third part depicts the method of analysis. Finally, the last part describe about research steps.

A. Research Strategy

This research uses several methods namely literature review and field research through interview as qualitative methods. Neuman (2006) states that "Literature review is based on assumption that knowledge accumulates and that people learn from and build on what others have done". In addition, he explains that the field research is more unstructured and researcher should well prepare for the field.

Furthermore, the research takes Banten Province Indonesia as a case study to compare the implementation of Capacity development of SEA from international experiences. In case study the researcher can compare one or two or limited set of cases which emphasizes on several factors (Neuman, 2006). Banten province was selected as case study because the regional had implemented the SEA. In addition, access to information is available. Banten Province is located in Java Island Indonesia and the map is provided in the appendix.

In addition, the research compares the capacity development from international experiences (The Netherlands and Macedonia) and Indonesia. The Netherlands is chosen because this country has long time knowledge about environmental assessment especially EIA and SEA. The Macedonia has similar condition with Indonesia as developing country and has experiences with capacity development of SEA.

B. Data Collection

The data of the research were obtained from several sources. The primary data was conducted in Indonesia and The Netherlands. While, the Macedonia case was obtained from secondary data. The description of the data is provided below.

- Primary data was collected through interview. The interviews were conducted by interviewing the actors that have contributes to the capacity development of SEA. The respondent included the Ministry of Environment; expert from national level; SEA-maker; decision maker, environmental agency staff, planning agency staff, and non-government organization from Banten Province. The composition of the respondent can be seen in the table below.

- The secondary data was collected from government report, document, and other publications related with SEA implementation. The secondary data used in this research includes theory of SEA, capacity development, capacity development of SEA and its implementation in several countries.
- Literature review was obtained from books, journal articles, reports, proceedings, and documents from reliable sources.

Method of Interview

The interviews were conducted using structured interviewing method. The interview conducted with some of the basic questions to obtain more in-depth information (Neuman, 2006). The complete interviewees are listed below.

No.	Country	Institution	Interviewees
1.	Indonesia	KLH RI	Mr. Zulkarnaen Daulay
		Expert	Ir. Arie Djoekardi
		SEA maker	Dr. Asep Sofyan
		Decision maker	Dr. H. A. Karimil Fatah, MM, M. Si
		NGO	Np. Rahadian
		Environmental Agency of Banten Province	Wawan Wahyudi, S. Si
		Planning Agency of Banten Province	
		Environmental Agency of Pandeglang District	Ir. R. Andriawan
2.	The Netherlands	NCEA	Dr. Bobi Schijf
Total		9	9

Table 1 List of interviewee composition

C. Method of Analysis

Method of analysis uses qualitative analysis through comparing similarities and differences (Neuman, 2006). The research compared the implementation of capacity development of SEA in Indonesia and in several countries. The main focus is to find the weaknesses of implementation of capacity development of SEA in Indonesia. Then, it looks for lesson of good practice from international experiences in capacity development of SEA and formulating recommendations for Indonesia especially local and regional level. Furthermore, it utilized policy transfer for understanding experiences from different places (Dolowitz &Marsh, 1996).

No	Question	Indonesia	The Netherland	Macedonia
1.	Can you describe the implementation of capacity development of SEA in Indonesia/The Netherlands?	Literature interview	Literature interview	Literature
2.	From the literature, there are three dimensions on the capacity development. How does capacity development of SEA in Indonesia deal with those dimensions? a. System Capacity • Policy and regulation, 1. Are there policies and regulation about SEA? 2. Is there support from executive? 3. Is there support from legislative? 4. Is there Evaluation of policy and regulation? • Guidelines 1. Are there guidelines for making SEA document which can a book or website portal? 2. Is it the guidelines in line with international standard? 3. Is it easy way to access 4. Is it has guidelines for interaction among stakeholders? 5. Is it the division of tasks between department and agency clear? • Monitoring system 1. Is it has monitoring system of capacity development of SEA? 2. Is the system well conducted? 3. Is the system can improve the implementation of capacity development of SEA? 4. Who is responsible for monitoring? • Procedure	Literature interview	Literature interview	Literature

	1. Is there procedure for implementing SEA? b. organizational capacity • Financial basis and accountability 1. Is there financial support for SEA? 2. How about the amount of budget? 3. How about the continuity of budget support? 4. How about the transparency of budget? • Structure and working condition 1. Is it has clear structure and task? 2. It is has sufficient human resources? 3. It is has good atmosphere for work? c. Individual capacity • Training and workshop 1. Is there training and workshop for transfer of knowledge and raising awareness about SEA? 2. How many of training and workshop? 3. How many participants who have participated in the training? 4. Are he participant diverse from all stakeholder? • Leadership and Front runner 1. What is defines of leadership and front runner? 2. How about the quantities of leadership and front runner of SEA in the region? 3. How about the distribution of leadership and front runner? 4. Is there the network of leadership and front runner?			

	• Expertise and Professional development 1. Are there professional development? 2. Are there networks and pilot projects for improving the experiences? 3. How much he amount of expert of SEA? 4. How about the distribution of expert?			
3	How to measures the effectiveness of capacity development of SEA from those levels?	Literature interview	Literature interview	Literature
4	How far the effectiveness of the capacity development of those three levels?	Literature interview	Literature interview	Literature
5.	What are the challenges for implementing the capacity development	Literature Interview		
6.	How to improve the implementation the capacity development of SEA in Indonesia in line with those level of capacities	Literature interview		

Table 2 List of Question

D. Research Steps

The research is conducted in several steps in order to attain the research objectives as follow:

1. Literature review of theoretical background
   This step explores the literatures of Strategic Environmental Assessment (SEA) and the capacity development of SEA via reading and understanding the concept from literatures. In addition, it investigates also several international experiences from other countries concerning the capacity development of SEA.
2. Choosing and describing the case study
   It needs as study case to implement the research method. Therefore, the research was carried out in Banten because this region has implemented SEA. The information concerning the case study is collected from government documents, internet sources, and other literatures.
3. Primary data collection
   In this part, the collection of primary data conducted in Indonesia particularly Banten Province as the case study and in The Netherlands as lesson-learned. Moreover, the data of capacity development of SEA for Macedonia case are obtained from literature review.
4. Primary data analysis
   This part uses the comparative analysis. It is a comparison of studies in Indonesia, The Netherlands and Macedonia in order to enhance capacity development of SEA in Indonesia. Some learning will be considered to be implemented in the context of Indonesia.
5. Conclusions, Reflection and Recommendations
   In this part, the conclusion, reflection and recommendation are based on the literature review and the result of the research.

Chapter 4
International Experiences of Capacity Development of SEA

There are several practices on the capacity development of SEA from international experiences. For instance, the Netherlands developed an institutional capacity development approach and Germany promoted the courses for human capacity (Nelson et all, 2012). Moreover, they explain that the institutional capacity development of SEA in The Netherlands emphasizes on embedding SEA into planning practice which needs three pillars. Those pillars are availability of sufficient expertise in SEA application, the legal and financial basis for SEA and clear institutional structure and agreement of roles and responsibilities in SEA system.

Meanwhile, German trough *Gesellschaft für Internationale Zusammenarbeit* (GIZ or German Agency for International Cooperation) develops an SEA training course for capacity development of human resources. In addition, the important element of the course is consists of three aspect which are non-blue print approach, outcome orientation and learning orientation. Moreover, it gives suggestion that the effective SEA capacity development depends on the country, area and region's specific context, institutional setting and participation culture. Even though GIZ work on the capacity development of SEA for human resources, they also stressed the importance of developing institutional capacity.

Schijf (2012) gives several success factors for implementing capacity development in Macedonia namely using system approach, dedicated people, flexible approach, and local assistance. The system approach produces improvement in regulation and interaction among stakeholders. Dedicated people are very important to develop understanding and interaction between departments. Flexible approach means using the suitable strategy for different action.

This chapter explains more on capacity development of SEA in the two countries as representative of international experiences namely The Netherlands and Macedonia. The content of the report is in line with conceptual framework of three dimensions of capacity development. The first part describes the implementation of capacity development of SEA in the Netherlands. Then, it is continued by the experiences of Macedonia.

A. SEA in The Netherlands

The Netherlands have a lot of experiences in conducting environmental assessment. Environmental assessment (EA) has place and value in the Netherlands for over the past 25 years (Ten Holder, 2012). As the result, it produces greater environmental awareness and more environmentally friendly decisions. SEA as part of the EA has its own story in the Dutch context. For instance, the term of SEA was used after the EU making this tool as compulsory instrument via SEA directive in 2001. However, the principle of SEA was already included in the regulation of EIA. Another

example, The Netherlands Commission for Environmental Assessment (NCEA) is an independent expert body for examining SEA. The full history and other capacity dimension are described below. The story of SEA in Netherland was based on the literature review and interview with Dr. Bobi Schijf from NCEA.

1. System Dimension
   a. Policy and regulation

      The Environmental Impact Assessment already been conducted since 1987 as ordered by EIA decree. Interestingly, this decree also notes that this assessment had to be carried for plans and programs that could have a substantial impact on the environment (Van Doren, 2011). This kind of EIA has similar principal with SEA. In other word, the Netherlands has implemented the principal of SEA from 1987. As stated by Verheem and Tonk (2000), that SEA is one concept but multiple forms. It is in line with the interview, she stated that even though the regulation doesn't mention SEA but the regulation have role about Environmental Assessment for plan and program. It is more abstract and less technical and quantitative, more strategic.

      The Netherlands adopted the European SEA directive in 2001 and incorporated into regulation in 2006 (Van Buuren et all, 2009). As stated by Dr. Schijf from the interview, the Netherlands must change or match the regulation with SEA directive and SEA term is more explicit. The law states that an SEA must be conducted for policy proposals that meet several criteria as stated in environmental act.

      Based on Steinhauer (2012) and the interview, Dutch Environmental Assessment legislation experiences amendment again for the EA system on July 1st 2010. This amendment modified the procedure of EIA/SEA, but not the categories of plans, programmes and projects requiring an EIA or SEA. From the interview, the amendment is for modernization on environmental regulation. The purpose is for reducing administrative burden that produce simplified and comprehensive procedures. The motto is faster and better.

   b. Guidelines

      Dr. Schijf in the interview states that several guidance of SEA is available. For instance, The NCEA gives several advices to the competent authority. In addition, The NCEA provides knowledge of practice through key sheet and case example. NCEA establish the team for compiling good practice lesson and documented on paper and website and give presentation on workshop. The website is www.eia.nl.

      Another example, InfoMil inform government agency about the regulation of SEA. If the government want to know about the procedures and when to start

the assessment they can ask to the infoMil team. They also have website namely www.infomil.nl.

c. Monitoring system

According to the interview, for SEA system, the regulation states that every SEA had to be evaluated. It evaluates SEA experiences to get lesson learned and improving practice. The competent authority must evaluate the environmental consequences resulting from the performance of the plan. Moreover, according to Dr. Schijf from the interview, Evaluation of environmental regulation performance is still weak in the world including the Netherlands It is very hard to measure the effect of SEA to sustainable environment. Nevertheless, the government has research of effectiveness of SEA such as the 25 year of EA in Netherland.

In addition, individual SEA is reviewed by The Netherlands Commission for Environmental Assessment (NCEA) (Schijf, 2012). SEA is checked by independent expert body that checks the accuracy and adequacy of information for decision-making. In addition, the independent commission can give advises voluntarily for other stages in SEA process.

Referring to fact sheet of NCEA (2011), the competent authority is advised by NCEA at two phases of the assessment process. Firstly, the NCEA counsel on the content of the report by voluntary basis at the start of SEA. Lastly, NCEA examines relevant environmental information for decision making and the quality of information after finishing SEA report. In addition, other stages of SEA procedure can be consulted by NCEA on voluntary basis. Moreover, NCEA also counsels on environmental assessment overseas. Mostly, the Department for International Cooperation of the Netherlands ministry of foreign affair conducts agreement for this service.

	Simplified procedure	Full procedure
Advisory report on scoping	Voluntary advisory report	Voluntary advisory report
Interim review	Voluntary advisory report	Voluntary advisory report
Review of SEA report	Voluntary advisory report	**Mandatory advisory report**
Review of supplementary material for the EA report	Voluntary advisory report	Voluntary advisory report

Table 3 Key sheet of NCEA (NCEA Advice, 2011)

Moreover, the type of advisory report is divided into two form namely mandatory and voluntary advisory report. The classification is based on the type of procedures as depicted in the table above.

d. Procedures

SEA procedures are laid down at the Environmental Assessment Decree latest amendment in 2010 (Steinhauer, 2012; NCEA website). The EIA/SEA procedure distinguishes between:

- Environmental Impact Assessment for (relatively) simple, straightforward permits: the simplified procedure. For instance, the simplified procedure suffices for permits related to the Environmental Act and Mining Act.
- Environmental Impact Assessment for complex decisions and SEA for plans and programmes: the full-fledged procedure. The full-fledged procedures are required for all projects which require an appropriate assessment on the basis of the Dutch Nature Conservation Act and all projects in which a government body is proponent (e.g. expansion airport, projects concerning the infrastructure, housing programmes).

2. Organizational Dimension

a. Financial basis

Dr. Schijf state “I don’t think we had funding from Europe or other donor for SEA in Netherland. The budget integrated into government budget. It is not necessary specifically for SEA. The central government also not directly mention the amount of budget for SEA. The local government must ensure that the staffs have sufficient capacity for SEA. Each level of government must provide budget for making SEA document of their policy plan and program. The budget depends on the need. However, as political priority shift and economic crunch, it gives more pressure on the budget of SEA.”

b. Structure and working condition

From the interview, Ministry for Infrastructure and the Environment is responsible for environmental management. For example, the ministry is responsible for SEA/EIA regulation. They also initiate certain development such as the revision of regulation; inform the stakeholder dealing with the regulation. They also organize the event for raising awareness like celebrating the 25 year of EA.

In addition, there are several organizations under the ministry which are involved for SEA. For instance, The Dutch knowledge centre InfoMil is the primary source of information, practices and environmental legislation and policies in The Netherlands. The responsibility is informing people, explaining,

and raising awareness about the regulation. Another example, NCEA is an independent advisory body expert as explained before. The organization was founded by government and established by decree in 1987 and it is an independent expert body that checks the accuracy and adequacy of information of SEA for decision-making (NCEA, 2011).

Based on key sheet about NCEA (NCEA, 2011), the statutory body and duties of NCEA based on Dutch Environmental Management act. It led by a chairman and three-person management team. It secretariat consist of 23 technical secretaries and 28 supporting staff. It has around 700 Dutch and international expert which represent all environmental discipline. For individual SEA, NCEA will set up working group of expert which headed by NCEA's chairman or chairperson. This group is assisted by technical secretary.

3. Individual Dimension
   a. Training and workshop

Dr Schijf stated that the training of SEA is the responsibility of private sector. For example, Geoplant provide training and the government agency send their staff according to their need. This is not initiates by central government but the private sector looking the opportunity in the environmental training. Another actor is association for environmental expert (VVM). This organization conducts several workshop of SEA. In addition, Several University and Polytechnic such as VU- Amsterdam, IHE, ITC, and Utrecht have curriculum for SEA (www.eia.nl).

   b. Leadership and Front runner

Unfortunately, the researcher doesn't ask the interviewee about this topic explicitly because of limited time. However, it can be concluded from the interview and literature implicitly that there are many front runners in the Netherlands, for example the official in the ministry of environment and infrastructure, InfoMil, NCEA, academics, private and professional.

   c. Expertise and Professional development

According to the interview, the Environmental experts have Association namely VVM to accommodate the sharing experience and knowledge. It organizes several workshops and conferences. It is a professional Dutch community which contributes to the exchange of idea, learning for other people, best practice experiences, bringing expert together to discuss SEA, raising the capacity and awareness of environmental assessment. The amount of environment professional in Netherland is around 1000 people. The website for this professional association is http://www.vvm.info/.

4. Process of capacity development of SEA

The example of capacity development process in the regulation aspect is explained here. As the Netherlands have tradition on consensus planning, the capacity development of SEA was involving all stakeholders. From several informal meetings between stakeholders, there is a need to changes the regulation of SEA in the environmental law. Therefore, there are changes in the Environmental law in 2006 and 2010. Nowadays, the implementation of SEA is based on the new law. Recently, there is a discourse for new amendment of the environmental act according to the interview.

5. Effectiveness of SEA in The Netherlands

Dr. Schijf expresses "The effectiveness based on research is relatively positive. The general massages that SEA is not dramatically change the plan and program. The most common is little shift toward sustainable alternative or better environmental monitoring program. In addition, the process of SEA is involving different stakeholder. Therefore, it gets better input and support from stakeholders. Moreover, SEA is most effective in scoping stage/early process."

For effectiveness of individual SEA, Van Doren (2011) reveals the substantive effectiveness which contains two types of SEA effectiveness namely performance effectiveness and conformance effectiveness. Performance effectiveness relates to the influence of SEA on the decision-making process and the actors involved in it. Conformance effectiveness concerns the influence that SEA has on the final decision and environment.

Moreover, she describes three levels of performance criteria which are acquaintance, consideration, and consent. SEA performance effectiveness is determined by interviews with experts. In addition, she explains also about three levels of SEA conformance effectiveness which are formal conformity, behavioural conformity, and final conformity. Conclusion of the conformance criteria based on content analysis of the draft of SEA and interviews.

Another research is published by Runhaar, H., F. van Laerhoven, P. Driessen & J. Arts in 2013. They use online survey and semi-structured interview method for gaining the opinion from EA actors in Netherlands. They conclude that EA is perceived as legal requirement by the Netherlands stakeholders. The stakeholders perform EA because they must conduct it, not because by their choice. In addition, the effectiveness of EA is high because most of the respondent realizes that the EA increase environmental awareness and support the environmental protections.

B. SEA in Macedonia

Macedonia performed SEA for progress toward EU membership (Andonova S P, & Jankovska M, 2009). In this case, Macedonia needs improvement in the standard of

SEA in accordance with EU requirement. Hence, Ministry for Environment and Physical Planning (MoEPP) has cooperation with NCEA for the capacity development of SEA. The cooperation includes the institutional, organizational and human capacity within government and society. The capacity development of SEA in Macedonia is described below.

1. System Dimension
   a. Policy and regulation

      In this country, SEA is defined as procedure implemented by the state administrative bodies and local self-government units when adopting strategies, plans and programs for several purpose (MoEPP, 2012). The main regulation on SEA in Macedonia is Law on Environment from articles 65 until 75 (MoEPP, 2012; Andonova S P, & Jankovska M, 2009; www.eia.nl). The law was updated in 2008 and in 2010. Recently, the regulation is coherent and consistent with the ministry's vision on SEA also meets EU standards (www. eia.nl). In addition, several decrees support the law such as:

      a) SEA procedure is established in the Law on Environment ("Official Gazette of the Republic of Macedonia" No. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10 and 51/11), in chapter 10
      b) Decree on the content of the report on the strategic environmental assessment (Decree on report on SEA) ("Official Gazette of the Republic of Macedonia" No.153/07);
      c) Decree on the public participation in the process of preparation of environmental regulations and other acts as well as environmental plans and programmes (hereinafter: Decree on public participation) ("Official Gazette of the Republic of Macedonia" No. 147/07 and 45/11);

   b. Guidelines

      According to Schijf (2012), the online SEA portal was established for connecting between the MoEPP and society which have interest with SEA. In addition, the portal provides also the regulation and all the guidance and case material. The website portals are www.sea-info.mk and www.moepp.gov.mk (MoEPP, 2012).

   c. Monitoring system

      In the Environmental law article 75, the Initiator of the planning document is responsible for monitoring the impact on the environment and on human health caused by the implementation of the planning documents (MoEPP, 2011). Furthermore, the evaluation of SEA document is the responsibility of Ministry for Environment and Physical Planning. The MoEPP provides an opinion on SEA during participation step. Then, the revised SEA

version is checked again by MoEPP. For this second step, a certified expert can be hired by MoEPP based on article 72.

d. Procedures

Referring to MoEPP (2012) and Andonova S P, & Jankovska M, (2009), the procedure for SEA is divided into eight steps namely determining the need of SEA, determining whether the planning document subject to SEA, preparation of report on SEA, public participation, evaluation of the report on SEA, trans-boundary consultation, adoption of the PD (strategies, plan and program) and monitoring.

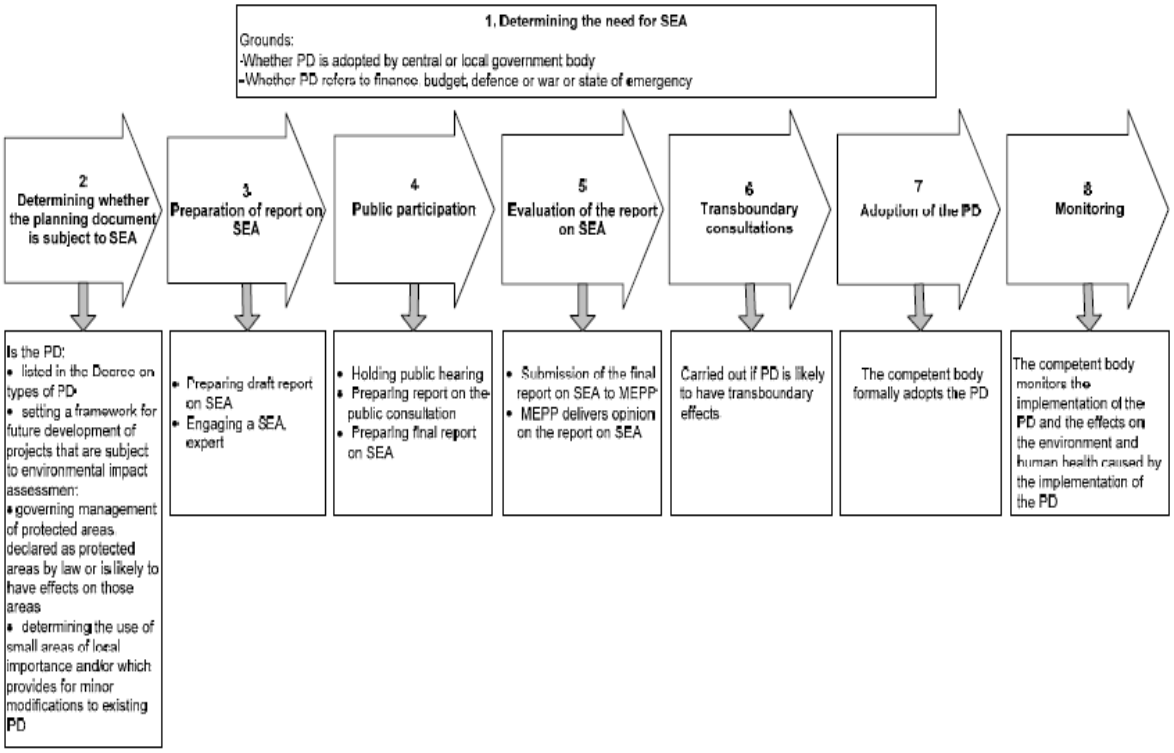


Figure 8 SEA Procedures in Macedonia (MoEPP, 2012)

2. Organizational Dimension

a. Financial basis

There are two sources of budget which come from own budget and donor. The example of donor budget is the 2-year co-operation project between the Ministry of Environment and Physical Planning of Macedonia MoEPP, and the Netherlands Commission for Environmental Assessment (NCEA) in January 2010 which contains capacity development of SEA (www.eia.nl). Moreover, The Dutch Ministry for Environment (VROM) through the Environmental Facility of the Government to Government (G2G.NL)

programme support the funding. The project is implemented by the EVD (Agency for International Business and Co-operation).

b. Structure and working condition

The implementation and performance of SEA system is the task of the Ministry of Environment and Physical Planning. The role of stakeholders of SEA in Macedonia is depicted in the picture below.

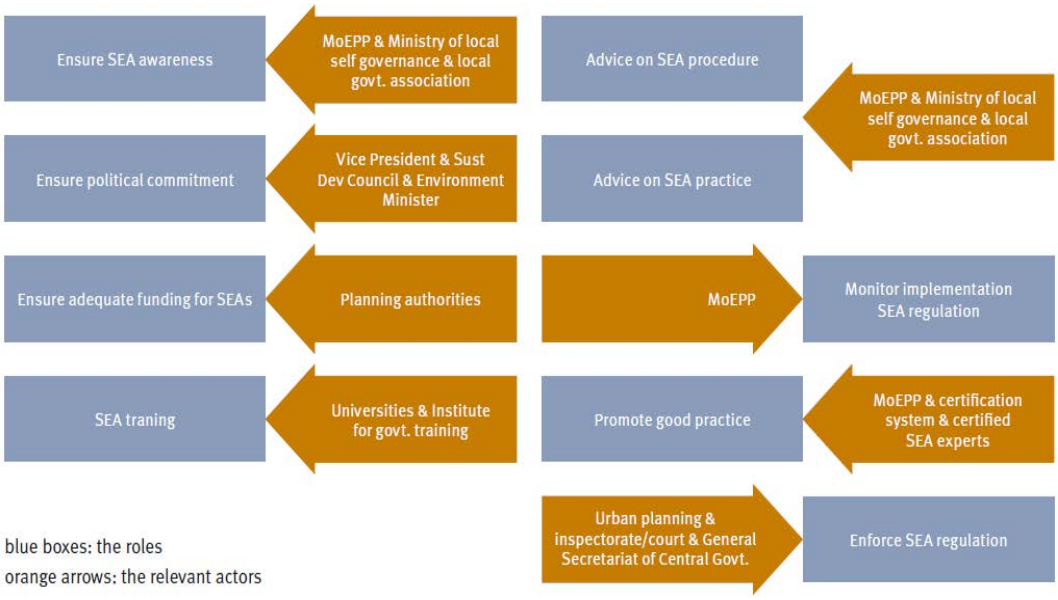


Figure 9 Outcome of a work session at the MoEPP on SEA roles (source: Schijf, 2012)

3. Individual Dimension

a. Training and workshop

Based on Schijf (2012), the training for SEA professional is carried out by universities and training institute. Moreover, the training for ministry staff was carried out in the Netherlands as study tour in a week. Thus, the staff gains knowledge and experience from this activity. In addition, three national SEA seminars and three series of smaller scale workshops were conducted at various locations. Moreover, the regional workshops are conducted for municipalities and focused on local planning.

b. Leadership and Front runner

There are no data for this criterion.

c. Expertise and Professional development

According to Schijf (2012), Certified SEA expert is a relatively uncommon feature of SEA systems in Europe except Romania and the Czech Republic

which have a certification system. In the initial years, SEA certification system was not working well. There were only five certified experts in 2009. This is exacerbated by charging a high fee and some were deploying themselves unevenly. In 2012, the number of certified experts is heading towards 30 and making enough competition. In addition, the quality of the experts has also increased and there was an opportunities for professional exchange through the cooperation project.

Furthermore, an excellent example of SEA in Macedonia is SEA-report for the Prespa Lake Watershed Management Plan for water management sector (NCEA, 2011). It is because the SEA-report has a lot of data on problem analysis, objectives and possible measures to deal with the problems in the Prespa Lake area. The interventions and different measurement are needed for improving the water quality and quantity. SEA documents worked jointly between the Macedonian and experts from the Netherlands resulting learning by doing process.

4. Capacity development process in Macedonia

The cooperation on capacity development in Macedonia starts with analysing SEA system from two aspects (Schijf, 2012). First, it identified the diverse roles for an effective Macedonia system. For example, ministry staff should be responsible for advising SEA procedure and practice. Meanwhile, specific cases can be consulted to certified SEA consultant. Second, it emphasize on SEA procedure in the legislation. For instance, the municipalities have problem in the procedures of SEA especially in integrating SEA into planning. Therefore, it needs activities to deal with this obstacle. It can be concluded that the capacity development processes in Macedonia begin with the system dimension and continued with other dimensions.

5. The effectiveness of SEA

The research about the effectiveness of SEA was conducted by Andonova S P, & Jankovska M, (2009). The main point of the research is the effectiveness of SEA procedures. As the result, there is a hindrance among the official to differentiate between SEA and EIA procedures as quoted below.

> “There is a high level of understanding of the responsibilities by the municipalities and other governmental institutions about EIA and SEA procedures, but if we look more carefully on their answers, unfortunately, there is still misunderstanding and confusion about these two processes”.

C. Summary

The Netherlands has long experiences in Environmental Assessment from 1987. This country transposes SEA directive in their law in 2006 and another amendment in 2010. In addition, organization dimension for SEA is very strong and robust which is controlled by the ministry of infrastructure and environment through several organizations such as NCEA, and Infomil. It has clear structure and task and also clear procedures. The financial basis is good although experiencing tightening because of economic recession and political circumstances.

For individual dimension, the training is conducted by private sector and the officer will be sent to the training program if they need to improve their capacity. The environmental assessment is part of daily life of The Netherland context. There are a lot of academic and professional in this country. Meanwhile, process of capacity development itself is compatible with the steps from UNDP. This country has along experiences with consensus planning.

The Macedonian is the cases for developing country. They have experiences of capacity development of SEA which is supported by NCEA. SEA is one of the requirements to become EU full members. They have environmental law incorporating SEA and have several secondary legislations for implementing SEA. It has cleared responsible among the stakeholders. The environmental management is held by The Ministry of Environment and Physical Planning. The capacity dimension of individual was supported by NCEA through sharing experience and knowledge.

Chapter 5
Capacity Development of SEA in Indonesia

This chapter describes the capacity development of SEA in Indonesia with case study in Banten Province. The first part discusses the result from interview and literature review of capacity development of SEA in Indonesia based on the conceptual framework. The interview of Indonesian cases was obtained from expert, official from KLHRI and SEA-maker. Then, the second part explains the capacity development of SEA in Banten Province. The interview of Banten cases was obtained from provincial level (decision- makers, Planning Agency staff, Environmental Agency staff, and NGO) and district level (Environmental Agency of Pandeglang District).

A. General Overview of Capacity Development of SEA in Indonesia

SEA in Indonesia is called Kajian Lingkungan Hidup Strategis (KLHS). The main regulation of SEA in Indonesia is Act No. 32 in 2009 regarding environmental protection and management article 15-19 and 63. According to the law, Strategic environmental assessment is a series of systematic analysis, thorough, and participatory to ensure that the principle of sustainable development has become the basis and integrated in the development of a region and / or policies, plans, and / or program.

In addition, it also states that SEA is mandatory for Spatial Planning, Long Term and Mid Term National Development Plan, Long Term and Mid Term Local Development Plan, and the policies, plans, and/or programs which have potential impacts and/or environmental risks. Furthermore, the full story of capacity development in Indonesia is explained below.

1. System Dimension
   a. Policy and regulation,

      According to the interviews, all interviewees know that the main regulation of SEA is Environmental Act No. 32 of 2009. They also know about the derivative of the law and regulation from Ministry of Home Affair. The first derivatives of the law was ministerial regulation on SEA is the number 27 year 2009 regarding Guidelines for Implementation of Strategic Environmental Assessment. This regulation gives the principles and the values of SEA. The principles are an integrated, sustainability, focus, accountable, participatory, and interactive. Meanwhile, the values are interdependency, equilibrium, and justice.

      After two year, there was an amendment on ministerial regulation on the guidelines of SEA which is the ministerial regulation number No. 09 year 2011 about the general guidance of SEA. It has the same values. However, one of the differences is in the principle of SEA, the new regulation uses four different principle which are self-assessment, improvement of policy, planning,

and / or program, capacity building and social learning, giving effect to the decision making, accountable, participatory. In addition, the Home affair ministry also have a regulation regarding the technical guidelines of SEA for long term and medium term development in the region Number 67 of 2012.

Referring to the law, SEA study must include several studies including carrying capacity for development; estimation of the environmental impact and risk; performance of services / ecosystem services; efficient use of natural resources; levels of vulnerability and adaptive capacity of climate change, and level of resilience and the potential diversity of biodiversity.

All interviewees agree that implementation of SEA has support both from executive and legislative. The former supports with the real action in their annual, midterm and long-term program. The latter promote SEA by approving the new law of environment in 2009 which consist of legal basis for implementation. As expert state "The support of executive is reflected by the work of the government to prepare the policy output. The support from legislative takes place in the course of endorsement of provincial, regency and city regulations concerning long and medium development and spatial plan where SEA should be applied." However, the link and influence of SEA to decision making process is still weak in Indonesia (DANIDA ESP2 Program, 2013).

b. Guidelines

All interviewees are aware that both the Home Affair and Environmental Ministry have guidelines. The form is a book and also website portal. In order to encourage implementation of SEA, the Ministry of Environment publishes this SEA series of books, including Status Report Implementation SEA in Indonesia, Policy Paper SEA and Handbook SEA (KLHRI, book 4, 2007). The website Portal of Home affair ministry is http://www.kemendagri.go.id. Furthermore, the website Portal of Environmental Ministry is www.klhsindonesia.org. Meanwhile, the interaction among stakeholder is accommodated at klhsindonesia@yahoogroups.com.

As stated by official from KLH at the interview, the guidelines are in line with international standard because it was supported by international organization from Danish government namely DANIDA through ESP program. In addition, the task division between departments is clear based on the environmental act number 15 paragraph 2 as stated by expert below.

"In relation to the provision number 15 paragraph 2 of the Environmental Act, the Ministry of Environment manages the development of SEA system while the National Development Planning Agency deals with the implementation of SEA in long and medium term national development

planning and sectoral agencies take care of sectoral development planning. The Ministry of Home Affairs look after the implementation of SEA in long and medium term provincial development plans while the Ministry of Public Works direct the implementation of SEA in spatial planning."

c. Monitoring system

The expert and official form KLHRI state that there is no monitoring system established in Indonesia until now. At this time, the ministry of environment is still developing SEA quality assurance. Interestingly, SEA makers state KLH and MOHA have monitoring system. From the interview with official from KLH, the monitoring from both ministries only covers whether the region and local government complement the development and spatial plan with SEA or not. Referring to MR of Minister for Home affair No. 67 0f 2012 article 49, the evaluation ensures that SEA recommendations have been integrated into the Draft Final RPJPD and RPJMD province.

d. Procedures

All interviewees know that procedures of making SEA were regulated both in Ministerial Regulation (MR) of minister for environment number No. 09 of 2011 about the general guidance of SEA and MR of Minister for Home Affair Number 67 of 2012 the technical guidelines of SEA for long term and medium term development in the region. Based on those regulations, the procedure of SEA is divided into several steps as depicted in the diagram below.

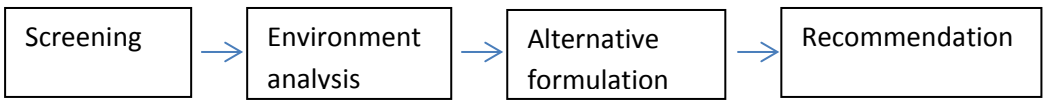


Figure 10 SEA Procedures in Indonesia

2. Organizational Dimension

a. Financial basis

Referring to the interviews, all interviewees mention that financial basis is provided by related ministries, regional and local government. For standard budget, the expert state that Indonesia doesn't have standard for implementation of SEA until now. In addition, the amount of the budget is various among them based on the requirement and approval from legislative bodies and financial basis is attached to the annual budget (official from KLRI). Moreover, SEA-makers declare that the amount of the project is depend on the scope of the project around 100 million until 1 billion rupiah.

In the environmental law, SEA implementation is compulsory. Therefore, all interviewees agree that the continuity of the budget is expected. The official

from KLHRI denotes “it is continuous every year for the ministry level because it is embedded in our task and function. However, the regions have their own budget system due to autonomous era. It depends on them.”

Every spatial, development and special plan needs SEA as complement to get approval. Hence, if the regions have those plans, they must provide the budget for making SEA. Meanwhile, the transparency of the budget is compulsory because it uses the public budget as stated by all interviewees.

b. Structure and working condition

It is declared by all respondents that the structure and task of institution is clear. It is because each ministries and local agency have division who responsible for implementing SEA. For instance, the ministry of environment has environmental governance deputy. Another example, SEA is the task and responsibility of directorate general of regional development in Home affair ministry.

However, all interviewees agree that all organizations have lack of human resources from ministerial level until local level. It means both capacity of the staff and the amount of the officer is still far from expectation. In the central level, the problem is not the capacity but the quantity of staff. On the other hand, the matters are capacity and quantity of staff in the region and local level. In addition, the apparatus are very enthusiastic with this environmental tool.

3. Individual Dimension

a. Training and workshop

SEA-maker state that the central government organized several training and workshop of SEA. Interestingly, the official of KLHRI expresses that the activity of improving the capacities of individual from this ministry are technical assistance and workshop. SEA intensive training by education and training centres of environment ministry has not existed until now. This kind of training is conducted by the university such as UI, ITB and IPB. However, the researcher doesn’t have data for the training on the universities. Moreover, experts state that environmental ministry already conducted workshop and technical assistance for 25 provinces and 170 regencies until 2012.

Both SEA-maker and KLHRI official express that each technical guidance and workshop from ministry has a lot of participant around hundreds people. They also have similar opinion about the participant. The participant is diverse and they are representing the stakeholders such as from legislative, decision makers, officer, NGO, and academics.

b. Leadership and Front runner

According to expert notion from the interview, the number of leadership and front runner is less than ten. Moreover, university network for those people was established in early phase development of SEA but continuity is questionable. Then, he defines leadership and front runner as:

"Leadership in SEA in Indonesia is characterized, among other things, by the support and willingness to develop the system of SEA that is applicable to the Indonesian situation. Front runners are those who have been involved in the development of SEA system and made it get implemented in development planning context. In this context, front runners do not mean academics only but also officials."

While, SEA-maker describe leadership and front runner as the person/group who run SEA research systematically. In addition, he mentions also the number around 10 groups in each provincial level which consist of consultant, university, NGO, etc. Both of interviewees agree that the distribution was uneven and concentrates in the Java Island especially in capital city. Interestingly, the official of KLHRI state that this kind of person or organization was embedded in the main task and function of ministry of environment and different with individual effort.

c. Expertise and Professional development

All interviewees agree that professional development already conducted in Indonesia. For example, expert state that professional development is involving the practitioner of SEA in seminar and conferences. Those activities were conducted by ministry of environment. In addition, they also state that there is a network of professional development. However, formal network is not formulated well.

Moreover, they also declare that there are several pilot project which conducted by MOHA, MOE, and National Planning Board. Based on KLHRI (book 2, 2007), there are ten document which consider as SEA document namely until 2007. In addition, the number of pilot project supported by DANIDA from 2008-2012 are around 26 document and the national government support financial aspect for more than 100 cases of SEA between 2011—2012 (DANIDA ESP2 Program, 2013).

From interviewees, there is a dichotomy for definition of expert of SEA. SEA expert and SEA makers agree that expert is the person who has knowledge about SEA not only academic but also official. Second, KLHRI staff said that expert is the person who has the certification of SEA as legal requirement not

only knowledge. The latter argue that the experts should have legal basis via certification process which proofing their expertise not based on own acknowledgment. Therefore, the ministry of environment proposes system certification in the government regulation draft.

The former states that there are many experts in Indonesia for example from the university and the ministry of environment. SEA-maker mentions the amount of Expert around 500 people. However, the distribution of kind expert is centered in Java Island especially in Capital City Jakarta.

4. Capacity development process in Indonesia

According to KLHRI (book 4, 2007), SEA implementation in Indonesia is quite slow, though cannot be said to be left behind. In addition, SEA is a discourse newly emerged in Indonesia since the mid- 1990s and begin to be tested in 2001. SEA development in Indonesia gets support from DANIDA since 2003. In the early beginning of the program, it involved the Ministry of Environment and National Planning Board. Furthermore, there is a systematic and well planned effort to introduce and institutionalize SEA in 2005. The implementation was in the form of pilot project, workshop and series of books and policy paper. The result of implementation was providing information and raising awareness of SEA among society.

DANIDA continue the program for supporting SEA implementation from 2008-2012. It was resulted in several SEA document and enhanced SEA experience among officer. Then, important momentum of SEA was the enactment of New Environmental Act in 2009 which include SEA as mandatory environmental assessment. SEA spread into regional and local level as a mandatory action.

5. The effectiveness of SEA in Indonesia

Suroso (2010) assessed the effectiveness of SEA in term of the integration of SEA in spatial planning. He concludes that “SEA integration into spatial planning process in Indonesia would be most effective at the RTRWK (District/municipality spatial plan) level”. It has several reasons. First, the upper level will give high uncertainty in general indication. Second, the development or conservation area had already decided in this level although the site is decided in the lower level.

The result of the interview indicates positive direction in the capacity development of SEA, although, there are still some aspects that need to be enhanced. The opinion of interviewee regarding effectiveness of SEA and how to measure is quoted below.

"The measurement of effectiveness of SEA is still prepared. In my opinion, the effectiveness of SEA is still ongoing process of development. Therefore it needs support from all stakeholders. In addition, we already conduct the individual capacity development like workshop and technical guidance and also prepared the training module. We also have several regulations of SEA and we already prepare the government regulation (RPP= Rancangan Peraturan Pemerintah). Then, we also develop the content of SEA and the plan for improving the expertise. To sum up, we already conduct the capacity development of SEA and we also should improve several aspects to make it better (KLHRI official)."

"To measures the effectiveness of capacity development of SEA from those level are : (1) investigate how many regulation such as spatial planning (RTRW= Rencana Tata Ruang Wilayah), strategic plan (Renstra), etc that already follow SEA guideline in each region in Indonesia, (2) investigate the amount of training related with SEA in provincial level. While, the effectiveness of capacity development of those three levels is good in national level and some province, but it is still lack in another province (need survey to know which province is good/not) (SEA-maker)."

"The effectiveness could be measured by the country achievement to perform sustainable development. Regarding the effectiveness of capacity development of SEA, system capacity in place is quite effective, while organizational capacity should be institutionalized further to be more effective. Individual capacity will become more effective through continuous development (Expert)."

B. SEA in Banten Province

Banten has produced several SEA document such as SEA for spatial plan, medium term plan, north coast of Banten and also Sunda Strait Bridge as stated by decision-maker, planning agency and environmental agency in the interview. In my opinion, it is interesting to discuss the capacity development of SEA in the region. Therefore, this part discusses SEA in Banten Province. First part discusses the three system dimension. Then, it is continued by process of capacity development of SEA. Finally, the effectiveness of SEA in the region will be explained.

1. Capacity dimension
   a. System Dimension

      All interviewees state that Banten province does not have regional regulation for SEA. It follows the regulation from central government. In addition, Decision-maker and NGO said that the regulation is enough. The essential matter is how to implement the regulation. While, the staff of planning agency declare that SEA need strong legalization like EIA. It is in line

with the opinion from staff of environmental agency of Banten Province, he said that the instrument for implementing SEA is not yet complete like EIA. Whereas, environmental agency of Pandeglang district express that the guidance from MOHA is better than guidelines from MOE.

Furthermore, all correspondents said that there is support from legislative and executive. The legislative support this instrument by entering this tool into annual budget and program. The executive promotes it in the annual activity. However, the staff of environmental agency states that SEA is not fully influencing the decision maker to achieves sustainable development goal; it is only for budget approval. In addition, three of interviewee (NGO and both staff of environmental agency of Banten Province and Pandeglang District) agree that the legislative doesn't fully understand the substantive of SEA. In addition, NGO state also that the executive is not maximal because SEA is not fully understood by society, private sector, and also by non-environmental official until now. He also states that the environmental agency do not have power in the policy development as quoted below.

"Environmental institution should lead the policy development. I have a dream that the environmental institution is at the front in making the policy development. Nowadays, this institution only act like fire extinguisher. It mean that the institution is not involved in the planning stage, but, involved when environmental damage or pollution arising. It indicates that the institution is less important than planning and budgeting agency. Moreover, the regulation from MOE is not implemented by others sector such as mining, forestry, public work, etc. Therefore, the environmental degradation is still happens from the activities of those sectors. It should be made that the environmental institution is involved in the early planning stage."

All interviewees know that guidelines for SEA are from central regulation such website and also book. While, if the monitoring system has been made, the regional level will follow it. In addition, they also aware that the procedure of making SEA is included in both regulations from minister of home affair and minister of environmental. In addition, the staff of planning agency and both staff of environmental agency of Pandeglang District and Banten Province mention utilization of Joint Circular Letter of three ministries which are Home Affair, Public Work and Environmental Minister for SEA of spatial planning.

b. Organizational Dimension

All sources mentions that financial support provided on the Development Budget and Expenditure of Banten Province at the planning and

environmental agency. The funding for SEA implementation was reserved from 2011 until now. In addition, the staff of environmental agency of Banten Province said the financial support from DANIDA through environmental ministry for several local governments like Serang and Tangerang municipality.

Furthermore, the amount of the budget every year is different based on approval from legislative and the needs from those agencies. The decision maker mentions around 200 million rupiah/year. Meanwhile, the staff of environmental agency of Banten province said around 300 million. Then, the staff of environmental agency of Pandeglang province states around 50 million. However, the financial basis is still focusing and producing of SEA document rather than the capacity development itself especially for individual dimension. Therefore, the regional level has lack of human resources on SEA.

The interviewee also states that regional inspectorate has responsibility to examine the transparency of the budget. They agree that the budget should transparent because it uses public budget. On the other hand, all respondent express that the structure and the task of agency are clear based on the main task and function of each agency. For instance, SEA is undertaken by structuring and enforcement of environmental law division in environmental agency. Meanwhile, the natural resources and the environment division handle SEA in planning agency.

Regarding the human resources for SEA, the NGO and planning agency said it is sufficient. The important thing is the commitment and effort of official to raise awareness and spread information about SEA. In the contrary, the decision maker, both staff of environmental agency of Banten Province and Pandeglang District agrees with insufficient human resources.

c. Individual Dimension

All interviewees know that workshop and technical assistance was conducted by ministry of environment and ministry of home affair. Some of them like staff of planning agency and staff of environmental agency of Banten province already participated around three times. They said those activities conducted in capital city and participants are diverse from different stakeholders and regions. The amount of the people in one event is approximately a hundred people.

However, both of them have different opinion about the content and the result of the workshop. The former assumes that the content of the workshop is sufficient for raising awareness and understanding SEA. The problem is the miss appointment of the appropriate staff by the head of agency. On the other hand, the latter states that the content of the workshop is not enough. Therefore, many officials still confuse about SEA concept and

they need training in several days to fully understand the concept of SEA. This opinion is in line with NGO notion. He said that the workshop and technical assistance is insufficient. It is because there are still many stakeholders who do not understand about it.

Three of the sources namely decision makers, and both staff from environmental agency state that leadership related with the person leading the region or institution such as governor and the head of the representative. On the other hand, two of the interviewee namely staff of Planning agency and NGO defines it as spirit, mental and commitment for leading to make strong institution.

In addition, they define the front runner as the person with high commitment cares and involved in the field. There are several person front runner and distributed in each stakeholder such as environmental agency, planning agency, public works, forestry, NGO. However, NGO said that there is no good leadership and front runner in Banten Province. Furthermore, the network of SEA for leadership and front runners is accommodated in working group of utilization and control land use.

From all interviewees, the professional institution does not exist in Banten. However, there are several pilot projects for improving the experience of staffs such as SEA of spatial plan of Banten Province, SEA in Serang and Tangerang municipality. They also said that experts of SEA do not exist in Banten Province. Government hires expert form outside region as stated by staff of planning agency like expert form MOHA and Universitas Indonesia.

2. Capacity development Process

The implementation of SEA in Banten Province is mandatory by law. Therefore, the government made several SEA document. For example, SEA for spatial planning was produced in 2011 because it is a new instrument and mandatory by law. However, Planning Agency makes this document without involving all stakeholders and appropriate assessment. In the next two year, the government of Banten Province via Environmental Agency made SEA document which are SEA for Mid- Development plan and SEA for North Coastal area.

3. Effectiveness of SEA in Banten Province

Regarding the measurement of effectiveness, the decision maker and staff of environmental agency of Pandeglang district agree that they will follows central government if the regulation exist or completed. Other three respondents have their own opinion as quoted below.

"We can measures the effectiveness from the commitment of stakeholders".(staff of planning agency).
"The effectiveness can be measured from the decision by decision-maker for the development in the area."(NGO)
"The effectiveness of SEA can be seen in the decision making process"(staff of environmental agency of Banten Province).

Concerning the effectiveness of SEA, the decision maker said that it is quite effective because the government already conduct several SEAs in this area. On the other hand, other respondents state that it is not effective because of several reasons. First, only few people know about SEA in Banten Province as stated by staff of planning agency. Second, the effort of government is unsatisfactory in raising SEA awareness and understanding of stakeholders as expressed by NGO. Third, the decision maker not fully implemented the recommendation in SEA document as mentioned by staff of environmental agency of Banten province. Lastly, the staff of environmental agency of Pandeglang district states that there is still lack of coordination between stakeholders, the budgeting is depend on the legislative which do not fully understand about SEA, and many stakeholder still do not understand about SEA.

C. Possible Improvement for Capacity Development of SEA in Indonesia

From the interviews, there are several opinions for improving the capacity development of SEA in Indonesia. Initially, the decision maker and staff of environmental agency of Pandeglang District have identical notion about conducting activity for raising awareness and commitment from all stakeholders especially the officer in implementing SEA in region. Moreover, the staff has another idea namely active effort from regional and local government to gain the knowledge of SEA.

Then, staff of environmental and planning agency of Banten Province have resemble opinion regarding the importance of legitimation and development of regulation instrument for implementing SEA like EIA regulation. In addition, staff of environmental agency of Banten Province adds with training and socialization provision about SEA particularly for top-executive and legislative.

Next, the officer from KLHRI emphasizes the importance of capacities of expert and consultant. Other ideas for improving the implementation of capacity development of SEA are quoted below.

"Open mind and developing the spirit to make the environment institution is important. Second, the environmental regulation must be obeyed by society, private and other sectors. In addition, the regulation should enhance the

awareness and sense of belonging of those actors about environment. Therefore, the government will get aid from society and private sector to resolve the environmental problems."(NGO of Banten Province)

"Improving capacity development of SEA could be done in ways where development planning regulation integrates SEA, government institutions dealing with development fully aware the integration of SEA in policy making and raising awareness and trainings of SEA are conducted in continuous basis." (Expert)

"To improve the implementation of capacity development of SEA in Indonesia in line with those level of capacities by (1) national level push each provincial level to do similar activity as national level, such as training, guidance, financial support for city/district level, local university, local NGO, etc. (2) increase amount training in lack human resources regions like Sulawesi, Papua and Maluku."(SEA-maker)

In addition, DANIDA through ESP2 program (2013) give several ways to link between SEA and decision making and planning process. First, linking SEA to particular planning and decision-making process clearly is needed. Second, communication with planning agency is essential for providing input in PPP and it preparation. Third, SEA result should be presented to key decision-maker such as head of agency or Mayor/Governor.

D. Summary

In the system capacity, Indonesia has several regulation and also guidance about SEA. Regional and local governments like Banten Province are in the passive state to follows the regulation from central government. Environmental management at national level is responsibility of MOE. Several ministries supports the implementation of SEA such as the MOHA, National Planning agency, and Public work. In Banten Province, SEA is responsibility of environmental and planning agency. In addition, SEA in Indonesia obtains funding from international organization DANIDA in early development of SEA. Nowadays, financial basis for SEA is mainly from annual budget of every ministries and regional and local government. For individual dimension, the ministries had conducted workshop and technical assistance. Recently, the MOE have plans to develop certification of expert. The purpose of certification is for generating more accountable SEA document. As a result, capacity development of SEA is effective in the national state. However, the implementation in the regional and local level still needs a lot of improvement. Several possible improvements were proposed by the interviewees and DANIDA-ESP2 Program.

Chapter 6
Possible Lessons-Learned

This chapter provide comparison of practices of capacity development of SEA among three countries and its possible lessons. The first part describes the table of comparison. The comparison is using the conceptual framework in the chapter 3. It is comparing not only the similarities but also the differences among those countries. The second part discusses possible lesson from Macedonia and The Netherlands for Indonesian context.

A. Comparison of Dimension of Capacity Development

As discussed earlier in the conceptual framework, there are three dimension of Capacity development of SEA which is examined in this research namely system, organizational, and individual dimension. The comparison between those dimensions from three countries is presented in the table below.

No.	Dimension	Indonesia	The Netherlands	Macedonia
1.	System			
	Policy and regulation,	• Environmental protection and management law No. 32 year 2009 • the ministerial regulation of environment number No. 09 year 2011 about the general guidance of SEA • Home affair ministry regulation regarding the technical guidelines of SEA for long term and medium term development in the region Number 67 of 2012	• The Environmental Management Act 1987 amendment on 28 September 2006 and 1 July 2010	• Law on Environment No. 53/2005, 81/05, 24/07, 159/08, 83/09 and 48/10 year 2005 updated in 2008 (159/08) and 2010.
	Guidelines	SEA series of books, Policy Paper SEA and Handbook SEA http://www.kemendagri.go.id. www.klhsindonesia.org. klhsindonesia@yahoogroups.com.	• Guidance on carrying out an SEA • Website SEA portal	An online SEA portal
	Monitoring of system and individual report	The monitoring system is not established yet. The ministry of environment is developing SEA quality assurance.	• SEAs are reviewed by the Netherlands Commission for Environmental Assessment (NCEA). • *Monitoring* : the initiator authority	• Monitoring : Planning body • Evaluation: the Ministry for Environment and Physical Planning.
	Procedures	• The procedures are regulated both in MOE Decree and MOHA decree.	SEA procedures are laid down in the Environmental	Law on Environment, articles 65-75 and

		• The internal management procedures and framework is based on each ministerial regulation in line with the task and responsibility of ministry and agency.	Assessment Decree (latest amendment 2010)	relevant decrees
2.	Organizational			
	Financial basis for SEA	• Government budget and donor support (DANIDA) • Regional level more focus on making SEA document than capacity development of SEA	Government budget	Government budget and donor support (NCEA)
	Structure and working condition	• Ministry of home affair, Ministry of Environment, National Planning Board, Ministry Public work, regional and local agency. • Lack of human resources and facilitation	• The Ministry of Infrastructure and the Environment • The Dutch knowledge centre InfoMil • NCEA	The Ministry of Environment and Physical Planning, The Ministry of Foreign Affairs, Expert, NGO and public.
3.	Individual			
	Training and workshop	• Workshop and technical assistance for 25 provinces and 170 regencies. • There was no full training conducted by Government	SEA training was provided by private sectors and curriculum from different University such as ITC, Utrecht	Cooperate with NCEA
	Leadership and Front runner	Academics and official	Academics, professional and official	No data
	Expertise and Professional development	• Dichotomy of expert, MOE develop certification of expert • There was no organization for professional	• Association of Environmental Professionals (VVM)	Certification : to-wards 30 expert (Schijf, 2012)

Table 4 Capacity Dimension Comparison among three Countries

B. Possible Lessons- Learned

Based on literatures and interviews, there are several shortcomings of implementation of SEA in Indonesia. First, several regulations still need to be completed such as quality assurance and government regulation draft of SEA. Second, capacities and commitments of the stakeholder are still become problems especially in the regional and local level which related with training, workshop, expertise and professional development. Lastly, SEA is not yet fully affects the decision-making process.

Those problems can be solved by several ways. One of the solutions is by learning from experience of other countries as lessons-learned and looking for possible policy transfer. The definition of policy transfer is a process of using the knowledge about policies, administrative arrangements, and institutions in one time and/or place for the development of policies, administrative arrangements and institutions in another time and/or place (Dolowitz and Marsh, 1996). Moreover, there are seven objects of transfer which can be used as lessons-learned namely policy, goals, structure and content; policy instruments or administrative techniques; institutions; ideology; ideas, attitudes and concepts; and negative lessons. Hence, several possible lesson learned from two country are describe below.

1. Netherland
   a. System dimensions

      The quality assurance of SEA is checked by NCEA through independent expert. This kind of expert is free from political intervention. They examine only the content of the document especially adequacy and accuracy of information for the decision making. The decision making itself is handed over to the decision maker. Therefore, they free from political pressure and have independency. Recently, the MOE of Indonesia is developing the quality assurance of SEA. Indonesia can learn from this system to gives let the quality assurance to independent expert and the decision making to decision maker. Therefore, it will help the independency of SEA commission and avoid political pressure, not like in the EIA commission which have a lot of pressures.

   b. Organizational dimension

      The organizational dimension of SEA In Indonesia has good structure and division of task between departments. In addition, the financial basis of SEA is adequate because it has its own budget and also support from donor country. However, it still has several shortcomings. Initially, the capacity of officer is still inadequate to perform SEA especially in the regional and local level. Then, the financial basis for SEA is existed, but regional and local government still focus on making SEA document not for capacity development. The possible lesson learned is, the government established institutions like InfoMil for improving the capacity of staff. Therefore, the official can ask regarding SEA to that institution.

   c. Individual dimension

      Individual capacity in Indonesia has many shortages such as training, expertise and professional development. Therefore, it should have more attention than the two others dimensions. Therefore, MOE is preparing module for training, and certification expert. The lesson learned for training is provider of

training can be a private sector for making competition in the price and quality. In addition, SEA is incorporated into curriculum of college.

The Netherlands doesn't implement the certification of expert because it is very complicated and bureaucratic. This country emphasizes on the quality check or quality assurance of SEA process, information and document. This can be a lesson learned for Indonesia. It is because the certification of expert for EIA also has many problems. There is an opportunity for bribery and manipulation.

The professional development in The Netherland (VVM) is interesting. They conduct several workshop and activity for improving all dimension of capacity development. It is also a good example for implementing it in Indonesia. Therefore, the professional and expert are not only profit oriented but also improving the capacity development of SEA.

d. Effectiveness

The effectiveness of SEA in The Netherlands both from Van Doren and Art et all is a good example for measuring the effectiveness of SEA in Indonesia. The effectiveness of SEA should not only procedural but also substantive. In addition, the result of SEA should influence the decision making process and raise awareness of environmental protection.

2. Macedonia

As mention before, KLHRI has a plan to conduct SEA expert certification like EIA expert certification. Hence, the interesting point from Macedonia case is certification of experts. In Macedonia, certification of expert is refers to Official Journal of RM" no. 129 in 2007 (NCEA website and MoEPP, 2011). The regulation contains the List with SEA experts, the procedure for carrying out SEA expert exam, establishment of the Commission for evaluation of SEA expert knowledge (Official Gazette No. 129/2007).

According to the regulation, the member of SEA evaluation commission expert has mandate for two year. This commission is consist of representative from environmental expert, environmental state authority and health state authority. The decisions are made by majority voting. In addition, examination is conducted twice per year. It comprises of written and oral exam. The written exam consists of question paper and case study. The certificate is valid for five years and can be extended for additional five year period.

However, researchers do not have data on the Indonesian expert opinions regarding certification of experts. It is because of time constraint.

C. Transferability Barriers

In the policy transfer, it should consider several hindrances process described by Dolowitz and Marsh (1996). First, the transferability is influenced by complexity. It will be harder to transfer if a policy or programme is more complex. Second, past policy affect the transferability. Third, the essential for transferring is the institutional and structural constraints. Lastly, Policy transfer is also dependent on the political system, bureaucratic and economic resources to implement the policy.

In Indonesian cases, several identified potential barriers are depicted below.

1. Political barriers

   One of the main obstacles is the support from political system. Until this moment, environmental aspect seems not a priority of most political actors in Indonesia. In addition, they are more concerned with their party interest especially for party and campaign funding. It means that environmental awareness of political actor still questioned and will be the barrier for implementing the policy transfer.

2. Economic resources barriers

   As the developing countries, government still focus on basic necessity of society such us health, education and infrastructure. Thus, the government budget allocated for those facet. On the other hand, environmental aspect is still neglected by government especially in most regional and local level. The budget for environmental management is far below other institutions. This is also quite difficult barrier.

3. Bureaucratic barriers

   It relates with role of environmental institution and also the assignment of official. Environmental institution has less significant role both in the decision making and planning process. Therefore, the decision usually did not consider the environmental aspects. Moreover, environmental institution only involved in the latest of planning stages or involved and also blamed when environmental damage has occurred. This is compounded by lack of proper officer placement. Commonly, knowledgeable-environment officers were placed in other agencies. On the other hand, non-knowledgeable environment officers were placed in the environmental agencies.

4. Social barriers

   Lack of environmental awareness of the society is also possible constraint. It is only certain groups who understand the importance of the environment such as environmental officer and NGO. Therefore, some communities will doubt the importance of the transfer policy of the SEA. They will recommend other aspect like policy transfer of economic improvement.

5. Cultural barriers

   The environmental assessment in the Netherlands is embedded in their daily activities. It becomes their culture in the development activities. Then,

environmental assessment has great influences and institutionalized. On the contrary, environmental assessment in Indonesia is only for approval of the budgeting. It is not the culture of the society and not institutionalized yet. Therefore, it is possible that SEA also have similar experiences with EIA which is only for obtaining budget. The Macedonian has long story with certification of expert and became their culture. The process of certification is quite good because it is their culture. In Indonesia cases, the certification process of EA like EIA is only for obtaining the legalization not yet cultured.

Chapter 7
Conclusion, Reflection and Recommendation

This chapter concludes the result of the research based on the conceptual framework and analytical overview. Then, the second part is the reflection of research thesis. It consist of the hindrance and the technical problem for doing the research. The last part is the recommendation for the capacity development of SEA in Indonesia especially for regional and local level. Another recommendation is the possible future research for academics purposes.

A. Conclusion

This research emphasizes on exploring capacity development in Indonesia especially in Banten Province. It starts from SEA appearance due to shortage of EIA implementation as explained in chapter one. SEA implementation has several challenges; one of them is capacity development. Indonesia as developing country has implemented SEA and faces this challenge. In order to improve the capacity development of SEA in Indonesia, this research tries to answer several research questions as follow.

1. What are the capacity requirements of SEA?

   Actually, there are many requirements for capacity development. This research emphasize capacity requirement of SEA in three dimensions of capacity development from UNDP(2008) and OECD(2006) which are system, organizational and individual dimension. The system dimension is related with the enabling environment of the entire system. It is the place for operational of organization and individual dimension. For instance, developing regulation is the basic need for implementing SEA.

   The organizational dimension means the ability of that organization to operate in the existing system. For example, financial support is essential for implementing SEA. Clear structure and task among stakeholders is another example. It will produce effective SEA implementation.

   The individual dimension is clearly about the skill and expertise. It is about how to develop individual capacity for stakeholder such as decision maker, officer, etc. This capacity is measured from the quality and quantity of training and workshop. Other criteria are the availability of leadership and front runner and also the professional development. In the end, those kinds of activities and criteria will develop skill, change attitude and behavior and also motivation and commitment.

   Those three dimensions are the content of capacity requirement. It should recognize also the process of capacity development. The process is based on the notion of UNDP which have iterative steps. Those capacities dimension and iterative process of capacity development are very useful to recognize and to improve the shortage of existing capacities.

2. To what extent the Netherlands and Macedonia fulfill the capacity requirements of SEA?

   The capacity developments of SEA from international experiences in this research are The Netherlands and Macedonia cases. In general, the Netherlands has 25 years' experience of EA and has fulfilled all capacities dimensions. The system is very good and makes the stakeholder aware about the environmental consequences. The quality of the SEA is maintained with the review of an independent expert body. The organizational dimension is very robust and clear and it is encouraged by sufficient budgeting. In addition, it is supported by the professional development to enhance individual capacities of stakeholders. The capacity development process of SEA in Netherlands is quite good because all stakeholders have same opportunity for giving input on the development. It should also remember that SEA can influence the environmental awareness of stakeholder gradually not in rapid changes.

   The Macedonian is a case for developing country. They have experiences on capacity development of SEA which is supported by NCEA. SEA is one of the requirements to become EU full members. Capacity development of SEA in this country encounters significant improvement after the cooperation with NCEA like improvement in the system and individual dimension.

3. To what extent Indonesia fulfill the capacity requirements of SEA?

   Indonesia has already implemented three dimension of capacity development. The result is on the right direction. However, there are several aspects that need improvement. For instances at system dimension, SEA still have weak influences on the decision making process. Moreover, the monitoring system does not exist yet. Until recently, government still develops SEA quality assurance.

   In organization dimension, Indonesia already has clear structure, medium working condition, and also moderate financial support. This is reflected from the insufficient capacity and the quantity of the staff especially in the regional and local level. Furthermore, the regional and local level budgets still focus on making document of SEA. Hence, other capacities are neglected such as individual capacity of officer.

   For individual dimension, the formal training is not yet conducted by government institution. There are only technical assistance and workshop for raising awareness and improving capacities of stakeholders. The formal training was already conducted by several universities with no standard of curriculum. In addition, professional association of SEA in Indonesia is not existed yet. This professional association can has potential opportunity to raising awareness of stakeholders and enhancing capacity of individual.

4. How to improve the Capacity Development of SEA in Indonesia?

Overall, the capacity development of SEA in Indonesia is on track. However, it still needs some improvement especially in the monitoring system and link between SEA, planning and decision making. The activities for improving the capacity of officer and also sharing experiences between practitioners are also need attention. Therefore, improving capacity development of SEA in Indonesia should focus on those weaknesses.

One of the methods of improving the capacities is by learning from the experience of other countries. The lesson form the Netherlands is quality assurance of individual SEA which reviewed by NCEA. Another point, the training is conducted by private sector and university. Finally, the professional development is one of the goods examples. It is a place for improving capacity of professional, sharing experiences, sharing knowledge, sharing opinion to improve the system and the implementation of SEA. The important message is the professionalization institutionalization of SEA practice in the government institution, independent commission and professional association. While, the important note from Macedonian cases is the expert certification.

Other ways are expressed by several interviewees and DANIDA via ESP2 program. One of the solutions is focused on the raising awareness and commitment, also improving the individual capacities of stakeholders. Furthermore, they also emphasize the important of improvement in the regulation and legitimation of SEA. Meanwhile, DANIDA through ESP2 program offer several solutions for connection between SEA and decision and planning process.

In addition, the integration among three dimensions (system, organizational and individual capacities) in the implementing the capacity development is important for improving capacities development of SEA in Indonesia especially in local and regional level. Moreover, it should follows also iterative capacity development process cycle in the conceptual model. The iterative process helps to find the shortcomings. Then, it also provides opportunity to find the solution for improvement. It is the process for design, application, learning and adjustment.

B. Reflection

There are several difficulties in this research. First, the Data for Macedonian cases is purely from literature review because of time and financial constraint. However, formal literature from the government of Macedonia is limited and using native language. Therefore, it needs additional literature. Those literatures were obtained from NCEA website and Dr. Bobi Schijf from NCEA. It happens also for The Netherlands cases, the interview only from one expert. Of course, it needs notions from other stakeholder. However, her opinion is very helpful for this master research.

Second, Public participation is one the pillars of Environmental assessment and it can be an added value for capacity development. The Netherlands have long experience with good public participation through consensus planning and also in SEA. Thus, it is a good opportunity to explore this matter in the research. However, the researcher cannot do the experiment because of limited time.

Third, the interviews in Indonesia especially for expert, SEA-maker and decision makers were difficult to be collected. It is mainly because of their activities and also the limited number of experts. Therefore, the data from expert and SEA-maker was gained by email and the data from decision maker was limited.

Finally, in the qualitative method, the quality of research depends on the quality of researcher. Hence, critic and suggestion are required. Furthermore, this research is only a small part of research on Capacity development of SEA. However, researcher hopes that it can give another point of view for the stakeholder in environmental management in Indonesia especially for regional and local level.

C. Recommendation

Recommendation in this research is provided for central government and also regional and local level. In addition, it also accommodates suggestion for future research.

1. Central government
   a. Since the regional and local government follow the regulation from central government, it is suggested that the central government develop regulation for SEA monitoring system. Then, the derivative regulation of the environmental law for SEA like government regulation is disseminated as soon as possible after it is approved by the legislative bodies.
   b. Improving facilitation for SEA implementation such as the network for sharing experiences and consultation is very helpful for the officer from regional and local level.
   c. Providing the formal training for official as well as the training for others environmental management in the education and training centres is important to improve skill.
   d. Providing appreciation for leadership and front runner to maintain their dedication and motivation.
   e. Providing and maintaining the continuity of network for professional development as place for improving experiences and knowledge among the practitioners and academic.
   f. Providing more activity for raising awareness of stakeholders is essential for changing attitude and behavior and also motivation and commitment.

2. Regional and local government
    a. Proactive attitude is essential to gain the knowledge and experience of SEA by frequent consultation with the ministries. In addition, they can make cooperation with universities for improving their capacities of staff.
    b. Providing budget not only for making SEA document but also for improving capacities of the bureaucrat.
    c. Focusing on the implementation of SEA in their area is important especially raising awareness of stakeholders (like legislative and decision maker) and society in the region like socialization and workshop.
    d. The perception of environmental agency as a less important institution should be changes. The officer in environmental agency should have a pride on their institution. It can be done by giving more roles from the Head of the region.

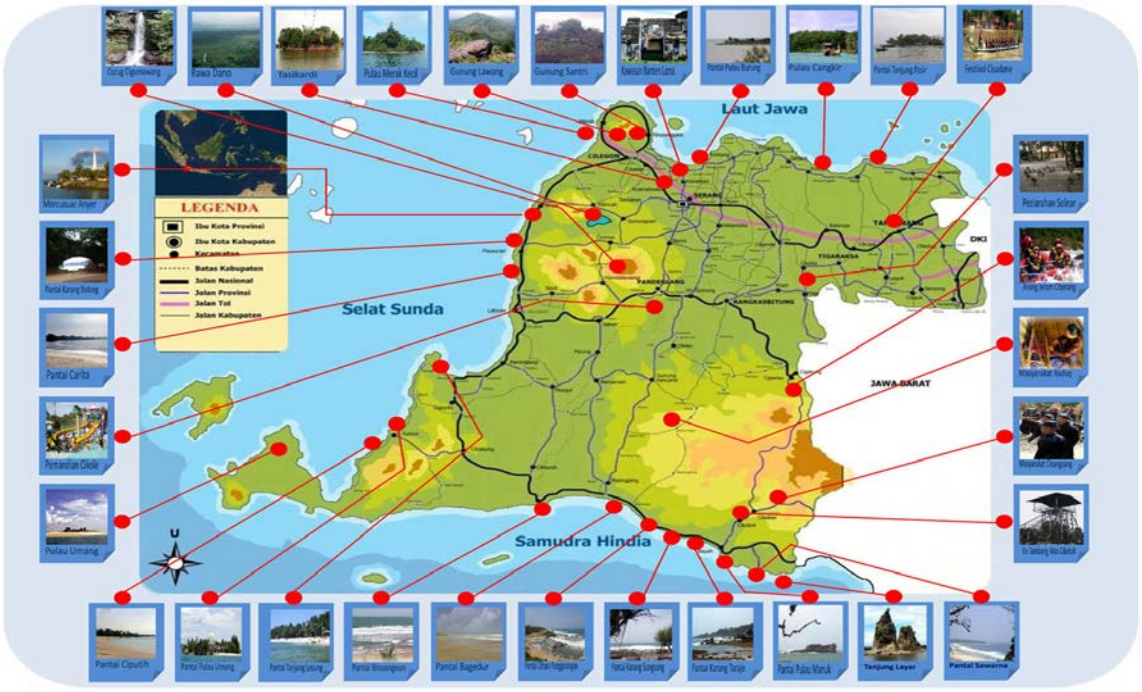
3. Future research

    There are still many opportunities for research in this area. For instance, the future research in Indonesia can be more specific on each dimension of capacity. Research on the individual capacity development is one example. This kind of capacity still has broad opportunity to explore. In addition, the opinion of Indonesian expert concerning SEA expert certification plans has not been studied as mentioned before. Hence, it is an interesting topic for a study. Then, the public participation is one of the pillars of EA and The Netherlands has good experience of it. Therefore, the study is essential to increase the capacity development in Indonesia.

Appendix 1 Map of Banten Province

Map of Indonesia

Map of Java Island



Map of Banten Province

References

Abaza H. Strengthening Future Environmental Assessment Practice: An InternationalPerspective. In: Lee N, George C, Editors. Environmental Assessment In Developing And Transitional Countries. Chichester7 John Wiley And Sons; 2000.

Act No. 32 of 2009 on the Protection and Management of the Environment republic of Indonesia.

Alshuwaikhat, Habib M. "Strategic Environmental Assessment Can Help Solve Environmental Impact Assessment Failures in Developing Countries." *Environmental Impact Assessment Review*, 307–317. 2005

Andonova S P, & Jankovska M. Effectiveness of the Environmental Impact Assessment and Strategic Environmental Assessment procedures in the Republic of Macedonia. Macedonian Green Centre. 2009

Banten Planning Board. SEA on Spatial Planning of Banten Province. 2011

Banten Environmental Agency. SEA on Mid-term development Plan. 2012

Banten Environmental Agency. SEA on North Coastal Area. 2012

Baser and Morgan, Capacity, Change and Performance Study Report, (ECDPM Discussion Paper 59B), Maastricht: ECDPM. 2008

Dalal-Clayton And Sadler . Strategic Environmental Assessment: A Rapidly Evolving Approach. Environmental Planning Issues No. 18, 1999

Dolowitz, D., D. Marsh. Who Learns What from Whom: A Review of the Policy Transfer Literature; Political Studies 54. 1996

Environmental Support Programme phase 2 (ESP2). Synthesis Study on SEA Lessons Learned. DANIDA. 2013

Fischer, Thomas B. Strategic Environmental Assessment in Transport and Land Use. Earthscan. London. 2002

Fischer, Thomas B. Theory and Practice of Strategic Environmental Assessment: Towards A More Systematic Approach. Earthscan. London. 2007

Kaplan, A. The Developing of Capacity, Community Development Resource Association, Cape Town, South Africa. 1999

KLHRI. Buku Pegangan Kajian Lingkungan Hidup Strategis. Jakarta, 2007

KLHRI. Kajian Lingkungan Hidup Strategis : Terobosan dalam pengelolaan lingkungan hidup. Jakarta, 2007

KLHRI. Pertimbangan-pertimbangan dalam Penerapan Kajian Lingkungan Hidup Strategis untuk Kebijakan, Rencana dan Program Penataan Ruang. Jakarta, 2007

KLHRI. Mengarusutamakan Pembangunan Berkelanjutan: Naskah Kebijakan KLHS. Jakarta, 2007

Mackay, R., Horton, D., Andersen, A., & Dupliech, L. Evaluating Organizational Capacity Development. *The Canadian Journal of Program Evaluation*. Vol 17 No. 2. Pages 121-150. 2002

Ministerial Regulation of Environment Minister Number 27/2009 regarding The Guidelines for Implementation of Strategic Environmental Assessment in Indonesia

Ministerial Regulation of Environment Minister Number 09/2011 concerning The General Guidelines of Strategic Environmental Assessment in Indonesia

Momtaz S. Environmental Impact Assessment In Bangladesh: A Critical Review. Environmental Impact Assessment Review,22(2):163 –79. 2002

MoEPP. Law on Environment. Official Gazette of the Republic of Macedonia. 2011

MoEPP. Strategic Environmental Assessment Implementation Step by Step brochure. 2012

Netherlands Commission for Environmental Assessment (NCEA). Some facts on the Netherlands Commission for Environmental Assessment. Key sheet. 2011

Netherlands Commission for Environmental Assessment (NCEA). NCEAs Advice: what it entail. Key sheet. 2011

Netherlands Commission for Environmental Assessment (NCEA). SEA for the Prespa Lake Watershed Management Plan. View and Experiences, 2011

Neuman. W Lawrence. Social Research Methods : Qualitative and Quantitative Approaches. 6th edition. Pearson Education, Inc. Boston. 2006

Nelson, Peter*, et al.* "Annex A: Capacity development for Strategic Environmental Assessment", in OECD, *Strategic Environmental Assessment in Development Practice: A Review of Recent Experience*, OECD Publishing. 2012

Organisation for Economic Co-Operation and Development (OECD), Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-Operation. OECD Publishing. Paris. 2006

Organisation for Economic Co-Operation and Development (OECD), "Executive summary", in *Strategic Environmental Assessment in Development Practice: A Review of Recent Experience*, OECD Publishing. 2012

Partidário Maria Rosário. Strategic Environmental Assessment (SEA) Current Practices, Future Demands and Capacity-Building Needs, IAIA Training Courses. 2003

Runhaar, H., F. van Laerhoven, P. Driessen & J. Arts (2013), "Environmental Assessment in the Netherlands: effectively governing environmental protection? A discourse analysis", EIA Review

Sadler Barry, International Study of the Effectiveness of Environmental Assessment, Minister of Supply and Services. Canada, 1996

Sadler Barry. Strategic Environmental Assessment: Institutional Arrangements, Practical Experience and Future Directions. International Workshop on Strategic Environmental Assessment, Tokyo, November 26-27, 1998

Schijf, Bobbi. Success Factors for SEA Capacity Development: the Macedonia Case, in view and experiences of NCEA series 11. P. 38-45. 2012

Suroso, Djoko. Spatial Planning and Environmental Assessment in Indonesia: A Case Study of The Strategic Environmental Assessment of The Surabaya Spatial Plan. USA: LAP LAMBERT Academic Publising AG & Co. KG. 2010

Steinhauer Ineke. Public Participation in EIAs and SEAs: Lessons Learnt in the Netherlands and their Application Abroad, in views and experiences of NCEA series 11. 46-55. 2012

Ten Holder, Veronica. Twenty-five Years of EA in the Netherlands, in view and experiences of NCEA series 11. P 4-9. 2012

Therivel Riki, Strategic Environmental Assessment in Action. Earthscan. London. 2004

Ubels, J., N. Acquaye-Baddoo and A. Fowler (eds.) Capacity Development in Practice, Earthscan, UK. 2010

United Nations Development Programme (UNDP). Practice Note: Capacity Development. 2008

Van Buuren, Arwin and Sibout Nooteboom. Evaluating strategic environmental assessment in The Netherlands: content, process and procedure as indissoluble criteria for effectiveness. Impact Assessment and Project Appraisal, 27(2), pages 145–154. 2009

Van Doren. The Effectiveness of Strategic Environmental Assessment in the Netherlands: An analysis of three cases. Master Thesis. University of Utrecht. 2011

Verheem R. A. A. & Tonk J. A. M. N. Strategic environmental assessment: one concept, multiple forms, Impact Assessment and Project Appraisal, 18:3, 177-182. 2000

World Commission on Environment and Development (WCED). Our Common Future. Oxford, England: Oxford University Press. 1987

http://www.eia.nl/countryprofile_detail_en.aspx?id=109
http://www.eia.nl/countryprofile_detail_en.aspx?id=45