



Stakeholders Identification of Participatory Public Policy Formulation Process: A Case Study of Kho Hong Hill at Hat Yai District in Songkhla Province

การค้นหาผู้มีส่วนได้ส่วนเสียในกระบวนการกำหนดนโยบายสาธารณะแบบมีส่วนร่วม:
กรณีศึกษาเขาค้อหงส์ อำเภอหาดใหญ่ จังหวัดสงขลา

Jariyaporn Masawat*

Saowalak Roongtawanreongsri

Faculty of Environmental Management, Prince of Songkla University, Thailand

Prakart Sawangchote

Faculty of Science, Prince of Songkla University, Thailand

*e-mail: jmasawat@gmail.com

จริยาภรณ์ มาสวัสดิ์
สาวลักษณ์ รุ่งตะวันเรืองศรี
คณะกรรมการจัดการสิ่งแวดล้อม มหาวิทยาลัยสงขลานครินทร์
ประภาศ สว่างโฉติ
คณะวิทยาศาสตร์ มหาวิทยาลัยสงขลานครินทร์

Abstract

Stakeholders are absolutely significant for public policy formulation because they are the ones affected by operational activities or projects based on the policy. This research study aims to develop a stakeholder selection process and relate it out in a case study of Kho Hong Hill (KHH) public policy formulation through reviews of literature and related research works, covering conventional methods. Then the synthesized methods were tried out. Its findings present that most policy formulation processes did not really emphasize the stakeholders. Participatory operation mostly focuses just only on stakeholder classification; however, there might not be real selection in the group to see who are directly related to problems. As a result, the researcher developed clear participatory public policy formulation process; stakeholder selection methods consisting of three steps: specifying stakeholder, specifying scope of stakeholder population and selecting stakeholders.

Keywords: Stakeholders, Stakeholder Selection, Public Policy Formulation Process, Kho Hong Hill.



บทคัดย่อ

ผู้มีส่วนได้ส่วนเสียเป็นกลุ่มที่มีความสำคัญในการกำหนดนโยบายสาธารณะ เนื่องจากเป็นผู้ที่ได้รับผลกระทบจากการดำเนินกิจกรรมหรือโครงการที่เกิดจากนโยบายนั้น ๆ งานวิจัยฉบับนี้มีวัตถุประสงค์เพื่อพัฒนาระบบการค้นหาผู้มีส่วนได้ส่วนเสีย ในกระบวนการกำหนดนโยบายสาธารณะแบบมีส่วนร่วมของประชาชน และนำกระบวนการที่ได้ไปทดลองใช้กับพื้นที่ป่าเขาของประเทศไทย ใช้วิธีการทบทวนเอกสารและงานวิจัยที่เกี่ยวข้องและสังเคราะห์วิธีการที่เหมาะสม งานนี้นับวิธีการที่สังเคราะห์ไปทดลองใช้ ผลการศึกษาพบว่ากระบวนการกำหนดนโยบายส่วนใหญ่ไม่ได้มีการพิจารณาผู้มีส่วนได้ส่วนเสียที่แท้จริงเข้าสู่กระบวนการฯ การดำเนินการเพื่อการมีส่วนร่วมในงานส่วนใหญ่จะมีเพียงแต่การแบ่งกลุ่มผู้มีส่วนได้ส่วนเสียออกเป็นกลุ่ม ๆ เท่านั้น แต่ไม่มีการพิจารณาอย่างแท้จริงว่าภายในกลุ่มนั้น ๆ มีใครที่เป็นผู้เกี่ยวข้องโดยตรงกับปัญหา ด้วยเหตุนี้จึงได้พัฒนารูปแบบในการค้นหาผู้มีส่วนได้ส่วนเสียในกระบวนการฯ ให้มีแนวทางที่ชัดเจน ซึ่งประกอบด้วย 3 ขั้นตอน คือ การกำหนดผู้มีส่วนได้ส่วนเสีย การกำหนดขอบเขตประชากรของกลุ่มผู้มีส่วนได้ส่วนเสีย และการคัดเลือกผู้มีส่วนได้ส่วนเสีย

คำสำคัญ: ผู้มีส่วนได้ส่วนเสีย การค้นหาผู้มีส่วนได้ส่วนเสีย กระบวนการกำหนดนโยบายสาธารณะ เขาของไทย

Introduction

Stakeholders are people who are directly or indirectly affected (both positive and negative) from project or activity operation based on a given policy. Stakeholders can be groups, individuals, organizations or institutions (Mianmit, Prasomsin, Jintana & Wanthona, 2006; Freeman, Harrison, Hicks, Parmar & Colle, 2010; Sudsawas, 2004) Currently, opportunities are given for stakeholders to participate more in activities or projects operation particularly in the aspects of environment, public health, education, and politics. The Royal Enactment of Decentralization Plan and Steps for Local Administrative Organization (1999) also opens opportunities for people to participate in natural resource and environmental protection and conservation (Mianmit, et al., 2006). However, the participation process sometimes allows only specific groups of stakeholders. There is no systematic stakeholder selection to include real stakeholders into the process. Example is found, for example, in a case such as national forest policy formulation where only specific groups of stakeholders were defined: politicians, businessmen, and academicians. The process was still an authoritarian and centralized in approach. Its lack of public participation (Sathansuk & Pattaratham, 2005) resulting in the lack of updated information; therefore, the problem of forest area decrease could not be solved easily.

Previous public policy formulation process was based on Top down Approach controlled by the central government, and people had to follow that policy (Fuengchan, 2009). The results of such process are often seen in unsuccessful and unpractical policies; conflicts, and rejection. Public policy formulation process should thus be processed from stakeholders' participation with real problems in the areas through participatory processes. This research study therefore aims at synthesizing a systematic stakeholder selection method as the first step before the participatory policy formulation can be done.

The researchers selected Kho Hong Hill (KHH) to be a case study for several timely reasons. First, the forest in KHH has experienced continuous decline due to conflicting uses of the area. Second, there have been some obvious environmental impacts that occurred from losing forest area on KHH such as drought, soil erosion, and loss of vegetation. Third, there was an effort from Prince of Songkla University, under the movement: Help Conserve KHH Project, to reconcile all the conflicts with conservation goals in mind. Fourth, from the mentioned effort, many stakeholders were already aware of the problem but there was still a lack in participation process in order to create some local policies that are suitable and appropriate for KHH. This research was therefore attempted to address the issues and at the same time finding suitable policies that are accepted by all stakeholders of



KHH. This paper, however, will discuss only the process of identifying the right stakeholders to be included in public policy formulation.

Objectives

To develop a stakeholder selection process and try it out in a case study of KHH public policy formulation.

Methodology

Research Steps. This research study was done through two main steps:

1) Developing a stakeholder selection method. This was done through extensive reviews of related researches and case studies of public policy formulation process nationally and internationally. All documents were analyzed, compared, evaluated, grouped and selected until the most appropriate method of stakeholder selection was ensured. The stakeholder selection process was

proposed from as a result of these synthesized reviews.

2) Trying out the proposed method from the first step with the chosen case study. The steps in the proposed method were followed using the case study of KHH. From the literature reviews we knew that there were usually eight groups of people involved in forest policy management. All these groups were identified and the "Stakeholder Selection Form" was used to gather data from all of them.

Population and sample. Table 1 presents the total number of prospective stakeholders in the case study. For people who had direct and indirect impacts from KHH group, academicians, private development organizations, and mass media, we reached a consensus to the solicited data. For government organizations, we selected purposively as they had direct responsibility over KHH.

Table 1 Number of Stakeholders at Kho Hong Hill

Stakeholders	Number
1. People	
1.1 Direct-effect users	
1.1.1 Landlord	288
1.1.2 Water users	3 organizations
1.2 Indirect-effect users	
1.2.1 Land users for entertainment	58
2. Academicians	13
3. Private development organizations	3
4. Mass media	12
5. Government organizations	
5.1 Forest organizations	4 institutions
5.2 Local administrative organizations	3 organizations

Research instrument. The research instrument was a "Stakeholder Selection Form" created by the researchers and validated by five experts having expertise in forest resource management.

Data collection and analysis. Quantitative data were collected using the "Stakeholder Selection Form" and were analyzed by statistical

descriptive analysis including percentage, average and summation. Qualitative data collected using focus group, interviews, observation and participatory observation were analyzed by content analysis, creating themes, grouping them and interpreting data.



Results

The results from trying out the research process were found as follows:

1. Synthesis of Stakeholder Analysis Steps

The reviews of national and international literature and related research ease and the researcher to conclude that the stakeholder selection steps to participate in public policy formulation process should follow three steps below:

1.1 Identifying Groups of Stakeholders.

According to the review of literature, each work identifies different groups of stakeholders, but from the analysis of the content, it found out that there are eight groups of stakeholders in formulating policies: people, private organizations, academicians, mass media, businessmen, government organizations, politicians and religious people (Emtage, 2004; Khaosa-ard, 2011; Mianmit, et al., 2006; Prell, Hubacek & Reed, 2009; Rastogi, Badola, Hussain & Hickey, 2010; Renard, 2004; Salam & Noguchi, 2006; Sunthornhao, 2009; Thaworn, Mianmit & Khetroat, 2008). The eight groups cover all related stakeholders. However, when formulating policies of some nature, the stakeholders might not cover every group of the eight groups, depending on the context of the problem involved.

1.2 Identifying Stakeholder Population

Size. This step is to find out who and how many they are in each group of stakeholders. From the literature review, a variety of methods are used in this step such as reviewing the meeting minute, reviewing related researches, discussing with community people, participating in community activities, and informal interview. The final product of this step is to know the number of the population of each group so that the sample can be drawn from them and selection method can be applied.

1.3 Selecting Stakeholders. This step is to select representatives of stakeholders in 1.2 to participate in public policy formulation. To select the stakeholders who are strongly related to the

problems, their need to be a set of logical criteria to consider. Most of previous works do not have specific selection criteria, which could be a weakness of participation. To overcome this weakness, the researcher thus created a “Stakeholder Selection Form” based on four-selection criteria: interests, effects, participation and importance and influence levels. These criteria were attained from the extensive review of literatures and related researches relating to stakeholder analysis, public policy formulation (Panyakul, 1993; Tanchai, 2011; Thanapornpan, 2009; & Wasi, 1999), forest resource participatory management (Emtage, 2004; Khaosa-ard, 2004; Mianmit, et al., 2006; Prell, Hubacek & Reed 2009; Rastogi, et al., 2010; Renard, 2004; Salam & Noguchi, 2006; Sunthornhao, 2009; and Thaworn, et al., 2008), environmental impact evaluation (Rattanachai, 2010), related literature and researches in the studied areas (Jawanit, Choosuk, Roongtawanreongsri & Sawangchote, 2011). Then the sub-component criteria specification was done through analyzing related literature’s differences and similarities (Grimble, 1998; Meraman, 2013; Mianmit, et al., 2006; Nichifurel, 2011; Raben, Nyingi, Loserian, Akello, 2006); Rastogiet, et al., 2010; Ravnborg & Guerrero, 1997; Reed, 2008; Salam & Noguchi, 2006; Saarikoski, Tikkanen & Leskinen, 2010; Sunthornhao, 2009). The form was then validated by five experts.

To select the stakeholders who were strongly related to the problem, the “Stakeholder Selection Form” was used to collect data from sampled stakeholders of each group. The stakeholders whose total scores were more than 50% will be selected to participate in public policy formulation process. However, in some groups of stakeholders, the number of the population may be very few or some may be related directly due to their responsibilities toward the problem, i.e. government organizations, these stakeholders can be selected purposively.



2. Trying Out of the Proposed Stakeholder Selection Method.

The researcher then tried the proposed process out with the case study of KHH, Hat Yai district, Songkhla province. This forest area has been facing with the problem of decrease in forest area. All steps were carried out exactly as proposed. The results are described as follow.

2.1 Study Areas

KHH is located in Hat Yai district in Songkhla province with the total area of 1,212.42 hectares. Based on Forest Act 1941, KHH is categorized as general forest. KHH provides many ecological services to people in the area such as fresh air, water supply and storm protection, and amenities and educational services. With the reduction of the forest, however, ecological services have gradually been lessened. Ploynilpetch (2012) stated that the decrease of original forest area at KHH was partly caused by the increase of rubber plantations supported by government policy on increasing rubber plantation areas as means to expand the export. The 1985 national forest policy which was formulated without public participation did not result in solving these problems, and KHH continues also to be under the threat of losing its fertile forest areas.

2.2 Trying out the Proposed Method

The method that was synthesized earlier was used as a try out at KHH area in Hat Yai district,

Songkhla province as one of the steps in the public policy formulation process (the policy formulation is not mentioned in this paper). The results of each of the three steps are described as follows:

(1) Identifying Groups of Stakeholders.

There are usually eight groups of stakeholders for forest management policy formulation: people, academicians, businessmen, private development organizations, mass media, politicians, government organization and religious people. However, in the case of KHH, there were only five groups of stakeholders: people, academicians, private development organizations, mass media and government organizations.

(2) Identifying Stakeholder Population

Size. Each group of stakeholders had population size (Table 1).

(3) Selecting Stakeholders.

Stakeholder selection was done using the "Stakeholder Selection Form" and the data was collected from land owners, recreational users, mass media, and academicians. Those whose score was equal or higher than 50% were selected to participate in the process. The remaining groups of stakeholders were chosen purposively because of their direct roles and responsibilities were government organizations, environmental organizations and water users. Selection results are shown (Table 2).

Table 2 Results of stakeholder selection at KHH area to be representatives for participatory public policy formulation process

Stakeholders	Selection Methods	Number
1. People		
1.1 People getting direct effects		
1.1.1 Landlords	"Stakeholder Selection Form"	14
1.1.2 Water users	Purposive Selection	3
1.2 People getting indirect effects		
1.2.1 Land users for entertainment	"Stakeholder Selection Form"	3
2. Academicians		3
3. Private development organizations	Select based on responsibilities	2 (institutions)
4. Mass media	"Stakeholder Selection Form"	3



Stakeholders	Selection Methods	Number
5. Government organizations		
5.1 Forest organizations	Select based on responsibilities	4 (institutions)
5.2 Local administrative organizations		3 (organizations)
Total		35

Some significant lessons of trying out the proposed method are worth noting as follows:

1) Affirming Lessons

1.1) The attempts try to cover the complete groups of stakeholders opened up the opportunities for the researcher to get in-depth and detailed information about the number and names of stakeholders in each group which led to the ability to select the true stakeholders who were related directly or involved eminently in the problem interested. Using this method, which was different from conventional methods, it was found that without identifying and searching for their individual names, stakeholders who were selected might not be the ones who really got the impact, or not the real stakeholders.

1.2) The proposed stakeholder selection process enabled the researcher and stakeholders to interact with each other and thus developed a good relationship that resulted in building mutual trust and acquaintance, which was later on important for policy formulation process.

1.3) The byproduct of the process was that the researcher had ample opportunities to exchange and transfer knowledge and understanding related to the research to other groups to make them understand and motivate them to participate in the research in whatever way as much as they could.

1.4) Stakeholders are more confident in policy formulation process leading to positive results such as trust, cooperation, honesty, and conflict resolution.

1.5) Policy formulation process operators

know and have opportunities to listen to problem in the areas in-depth through stakeholder selection process.

2) Learning Lessons

From this study, it was found that the “Stakeholder Selection Form” was too detailed; therefore, some stakeholders could not answer some questions. Specifically speaking, the form that was used to collect data from mass media comprised also questions about cultural traditions which they did not have any experiences with so they could not answer. As a result, this section got zero (0) score as they did not do any activities relating to culture in the KHH. Therefore, the form should be modified specifically to suit each of stakeholders.

It's a time consuming process to build trust and searching for names of all stakeholders in each group which can result in delaying of the research findings.

3. Conclusion of Stakeholder Selection Method

Public policy formulation process should allow real stakeholders to take roles in the process since they are the people who are affected by activities or projects as a result of public policy. In order to have the real stakeholders to participate in such policy formulation, the steps should be carefully applied as follows:

**Table 5** Conclusion of stakeholder selection steps

Steps	Methods	Caution
1. Identifying groups of stakeholders	Reviewing literature and researches related to stakeholder analysis such as public policy formulation, forest resource management, etc.	This step requires a lot of time, particularly the step of identifying stakeholder population size. Researcher should allot time properly so that it will not affect the operation of other steps.
2. Identifying stakeholder population size	Reviewing literature and researches related to area, discussing with community people, participating in community activities and interview to obtain stakeholder groups and names of the stakeholders in each group in the studied area.	
3. Selecting stakeholders	“Stakeholder Selection Form” Creation 3.1 Reviewing literature and related researches in public policy formulation, stakeholder analysis, forest resource participatory management, environmental effect evaluation, documents and related research towards the studied area. 3.2 Data analyze similarities, differences and synthesize the stakeholder selection criteria; each criterion has its own sub-components. 3.3 Using the “Stakeholder Selection Form” to select stakeholders who has the score of 50% or higher to the participate in the formulation process.	The “Stakeholder Selection Form” should conform to stakeholders’ contexts.

Discussion

From the research process and its results of synthesizing and trying out the proposed method for selecting real stakeholders to participate in public policy formulation with the application to the KHH study area, we would like to discuss the results step by step as follows:

1. Identifying Groups of Stakeholders

The findings revealed that stakeholders of forest policy are individuals or groups of people who are directly or indirectly affected (both positive and negative effects) the decision of government project operation. From the reviews of literature and related researches, they are generally composed of eight groups: people, private development organizations, academicians, mass media, businessmen, government organizations, politicians and religious people. However, most of the selection process did not identify the overall groups of stakeholders first to find out who can be involved in each issue (Buckles, 1999; Mianmit, et

al., 2006; Prell, et al., 2009; Raben, et al., 2006; Rastogi, et al., 2010; Ravnborg & Guerrero, 1997; & Sudsawas, 2004). By doing so, the previous conventional practice of stakeholder selection probably does not result in obtaining representatives from all groups of stakeholders.

2. Identifying stakeholder population size

Most of the conventional practice did not consider finding out who the stakeholders really are in each group, how many and how to find out who really should be involved. Previous works often used stakeholders that might not be real stakeholders in public policy formation process; therefore they could not solve the problems. Furthermore it caused conflicts and lacked of public participation (Anumanrachathon, 2009; Wachirakhajorn, 2006; & Wasi, 2009). However, to cover the whole population of each group, stakeholders require a lot of time and various methods of soliciting the data, for example,



reviewing the meeting minutes, reviewing related researches, discussing with community people, participating in community activities, and informal interviews.

However, there are other researches that try to use methods in identifying the number of stakeholder population; for example, Sudsawas (2004) and Mianmit, et al., (2006) used public meeting for stakeholder selection and proposal; then categorized them. Ravnborg & Guerrero (1997) began with asking about interests, problems and effects, conflicts and management and name proposing; then categorizing the stakeholders. Buckles (1999) started by analyzing problems; then analyzing stakeholders. Prell, et al., (2009) used focus group and interview the stakeholders; then categorized them, etc. Note that these researches do not mention the number of stakeholders in each group so it is possible to miss some stakeholders.

3. Selecting stakeholders

From the literature review about stakeholder identification for public policy formulation, it was found that there are only a few researches on stakeholder selection methods. Among those few researches, most of them mentioned the stakeholder selection, but did not go into detail about identifying the whole population of the stakeholders and how to scope and select the real ones (Martini & Yusuf, 2015; Colvin, Witt & Lacey, 2016; Krupa, 2016 & Hauck, Thomas & Smith, 2016)

The findings present that there were 35 stakeholders that participated in public policy formulation process for the KHH forest management. Although Richards, Davies & Yaron (2003) stated that appropriate number of stakeholders in participatory community forest managerial plan should not be more than 16 people per group. Since idea presentation and conclusion can be processed easily and quickly with smaller number, being the number suitable for a participatory process. Sudsawas (2004) also

proposed that it should be a limited number of participating actors, thus easing selection of stakeholders as the main role in community forest managerial plans. It is worth emphasizing that the selection process must be done based on the certain set of criteria, because selections without criteria could be biased in most cases.

Conclusion

Public policy formulation that does not have the real stakeholders involved in the process often leads to several problems and results in ineffective policy implementation. Thus, the selection of the real stakeholder's process must be the first and important step to take. This research attempted to synthesize a systematic stakeholder selection process to put those real representatives to participate in the public policy formulation process through reviews of related researches and case studies. The findings suggested that stakeholder selection process consists of three steps: identifying groups of stakeholders, identifying stakeholder population size and selecting the stakeholders.

Recommendations

For Research Finding Application

Stakeholder selection methods should be applied to find out real stakeholders in participatory processes. Methods created in this research can be applied in a variety of situations to solve problems in similar areas, not only limited to forest resource management.

Acknowledgments

This research was financially supported by a scholarship under the Strategic Scholarships Fellowships Frontier Research Networks (Specifically for the Southern region) program, the Office of the Higher Education Commission, Thailand.



References

Anumanrachathon, M. (2009). *Public Policy* (3th ed.). Bangkok: Expernet Co. Ltd.

Buckles, D. (Ed.). (1999). *Cultivating Peace: Conflict and Collaboration in Natural Resource Management*. Ottawa, Ontario, Canada, International Development Research Centre/World Bank.

Covin, R. M., Witt, G. B., & Lacey, J. (2016). Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the “usual suspects”. *Land use Policy Journal*, 52, 266-276.

Emtage, N. F. (2004). *Stakeholder's Roles and Responsibilities in the Community-Based Forest Management Program of the Philippines*. School of Natural and Rural Systems Management the University of Queensland, Australia.

Freeman, R. E., Harrison, J., Hicks, A., Parmar, B., & Colle, de S. (2010). *Stakeholders Theory*. New York: U.S.A. Cambridge University Press.

Fuengchan, S. (2009). *Public Policy: Theory and Practice*. Bangkok: Company of an Art creation Co. Ltd.

Grimble, R. (1998). *Stakeholder Methodologies in Natural Resource Management*. Natural Resource Institute, the University of Greenwich.

Hauck, K., Thomas, R., & Smith, P. C. (2016). Departures from cost-effectiveness recommendations: the impact of health system constraints on priority setting. *Health Systems & Reform*, 2, 61-70.

Jawanit, K., Choosuk, C., Roongtawanreongsri, S., & Sawangchote, P. (2011). *Survey of Knowledge, Understanding and Attitudes of Communities around Kho Hong hill towards its Values, Problems and Conservation Participation, Hat Yai District, Songkhla Province*. Prince of Songkla University, Songkhla. [in Thai]

Krupa, M. (2016). Who's Who in the Kenai river fishery SES: a streamlined method for stakeholder identification and investment analysis. *Marine Policy Journal*, 71, 194-200.

Khaosa-ard, M., & Wijhakprasort, P. (2004). *Style Mechanism with the Participation of Stakeholders in the Management of Natural Resources and the Environment*. Institute for Social Research, Chiang Mai University, Chiang Mai. [in Thai]

Martini, K., & Yusuf, M. (2015). Stakeholders analysis: management coastal policy implementation in rembang district. *Procedia Environmental Sciences*, 23, 338-345.

Meraman, M. (2013). Stakeholder Analysis for Sustainable Land Management of Pak Phanang River Basin, Thailand. *Procedia-Social and Behavioral Sciences*, 91, 349-356.

Mianmit, N., Prasomsin, P., Jintana, V., & Wanthona, S. (2006). Stakeholder Analysis for Participatory forest Resources Management Planning Process. *Proceedings of 44th Kasetsart University Annual Conference*, 498-505. [in Thai]

Nichifurel, R. (2011). Stakeholder Analysis of the Romania Forest Sector. The Annals of the "Stefanel Mare" University of Suceava, Romania. *Fascicle of the Faculty of Economics and Public Administration*, 11(1), 114-125.

Panyakul, V. (1993). *Rail Master Plan for forestry: The Failure to Protect the Forests of the State*. Development of Local Communities. Bangkok. Chulalongkorn University Publisher. [in Thai]

Ployninpet, N. (2012). *Economic Valuation of Timber, Poles, Seedlings on Kho Hong Hill, Hat Yai District, Songkhla Province*. M.Sc. Thesis, Prince of Songkla University, Songkhla. [in Thai]



Prell, C., Hubacek, K., & Reed, M. (2009). Stakeholder analysis and social network analysis in natural resource management. *Society and Natural Resources*, 22, 501-518.

Raben, K., Nyingi, J., Loserian, D., Akello, Z., & Kidido, M. (2006). *Identifying Local Stakeholders in Forest Landscapes Understanding the USE of Ecological Goods Kasyoha-Kitomi Landscape, Uganda Nguru South Landscape, Tanzania*. Tanzania Forest Conservation Group, Tanzania.

Rastogi, A., Badola, R., Hussain, S. A., & Hickey, G. M. (2010). Assessing the utility of stakeholder analysis to Protected areas management: The case of Corbett National Park, India. *Biological Conservation Journal*, 143(12), 2956-2964.

Rattanachai, C. (2010). *Environmental Impact Assessment*. 2nd ed. Bangkok, Chulalongkorn University Publisher. [in Thai]

Ravnborg, H. M., & Guerrero, M. (1997). Stakeholder analysis in natural resource management. *Agricultures Network*, 13(1), 12.

Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation Journal*, 141(10), 2417–2431.

Renard, Y. (2004). *Guidelines for Stakeholder identification and analysis: A manual for Caribbean Natural Resource Management and Planners*. Caribbean Natural Resources Institute.

Richards, M., Davies, J., & Yaron, G. (2003). *Stakeholder Incentives in Participatory Forest Management: A manual for Economic Analysis*. London: ITDG Publishing.

Saarikoski, H., Tikkanen, J., & Leskinen, L.A. (2010). Public participation in practice assessing public participation in the preparation of regional forest programs in Northern Finland. *Forest Policy and Economic Journal*, 12(5), 349-356.

Salam, M. A., & Noguchi, T. (2006). Evaluating capacity development for participatory forest management in Bangladesh's Sal forest based on 4Rs stakeholder analysis. *Forest Policy and Economics Journal*, 8, 785-796.

Stansuk, R., & Pattaratham, A. (2005). Participation in forest resource conservation of residents in Huai Mae Priang royal project area, Phetchaburi province. *Social Sciences Journal*, 26(1), 15-22. [in Thai]

Sudsawat, S. (2004). Stakeholder analysis. *Social Science and Humanity Journal*, 30(1), 12-15. [in Thai]

Sunthornhao, P. (2009). Interaction among stakeholder representatives and their stakes in participatory forest resources management. *Thai Journal of Forestry*, 28(1), 82-95.

Tanchai, V. (2011). Public Policy with Thailand People. Home town Column. *Post today*, 3548, 24 October 2011. [in Thai]

Thanapornpan, R. (2009). An alternative way to survive in the era of globalization. Retrieved January 22, 2011 from <http://midnightuniv.org/miduniv2001/newpage7.html>. [in Thai]

Thaworn, R., Mianmit, N., & Khetroat, R. (2008). *Forest Community Learning Process in Natural Resource Management with the Participation of Thailand*. Program Supports Partnerships in the Country. Regional Community Forestry Training Center for Asia Pacific. Kasetsart University Bangkok: Do My Best Co. Ltd. [in Thai]

Wasi, P. (2009). *Public Policy Process*. National Health Foundation. June 3rd 2009. Bangkok: Company of Beyond Publishing Co. Ltd. [in Thai]

Wachirakhajorn, S. (2006). *Basic of Public Policy*. Bangkok: Tanesuan Printing Co. Ltd. [in Thai]