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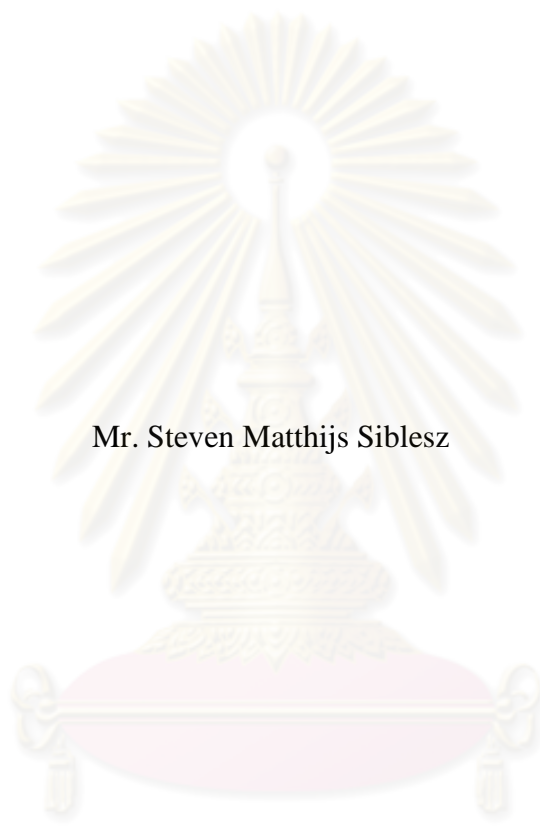สาขาวิชาการพัฒนาระหว่างประเทศ
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AN ANALYSIS OF PUBLIC PARTICIPATION UNDER COMMUNITY HEALTH
IMPACT ASSESSMENT OF THAILAND:

THE CASE STUDY OF THE GOLD MINING PROJECT AT
BAN NA NONG BONG, LOEI PROVINCE.

Mr. Steven Matthijs Siblesz

A Thesis Submitted in Partial Fulfillment of the Requirements

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การประเมินผลกระทบต่อสุขภาพเป็นความคิดที่ค่อนข้างใหม่ในแวดวงของผู้กำหนดนโยบายใน
ประเทศไทย จากมุมมองด้านความมั่นคงของมนุษย์ การประเมินผลดังกล่าวมีศักยภาพที่จะเป็น
เครื่องมือที่สามารถนำไปปฏิบัติใช้เพื่อสร้างพลังให้กับชุมชนท้องถิ่นในการปกป้องสุขภาพของตนได้
คุณลักษณะประการหนึ่งที่สำคัญของการประเมินผลกระทบต่อสุขภาพคือ กระบวนการการมีส่วนร่วม
ทางสาธารณะ ในขณะที่กลไกของการประเมินผลกระทบต่อสุขภาพกำหนดให้สาธารณะมีส่วนร่วมใน
ขั้นตอนต่างๆ ของกระบวนการ กระนั้นก็ตามแต่ความเสี่ยงก็ยังคงมีอยู่ เนื่องจากการมีส่วนร่วมของ
สาธารณะว่าด้วยผลลัพธ์สุดท้ายของการประเมินผลดังกล่าวยังเป็นไปอย่างจำกัด

งานวิจัยนี้ศึกษาโครงการเหมืองทองคำที่บ้านนาหนองบง จังหวัดเลย ซึ่งมีการประเมินผล
กระทบต่อสุขภาพโดยชุมชนเมื่อไม่นานมานี้ โดยการใช้กรอบวิจัยเป้าหมายสังคม ๕ ประการ งานวิจัย
นี้ประเมินความเป็นประโยชน์ของการมีส่วนร่วมของสาธารณะภายใต้การประเมินผลกระทบต่อสุขภาพ
ในประเทศไทย ผลการวิจัยพบว่า การมีส่วนร่วมของสาธารณะภายใต้การประเมินผลกระทบต่อสุขภาพ
ทำให้สาธารณะได้รับข้อมูลและความรู้ ซึ่งถือเป็นวัตถุประสงค์หลักของการประเมินผลกระทบต่อสุขภาพ
โดยชุมชน ในทางตรงกันข้าม ผลการวิจัยชี้ให้เห็นด้วยว่า การประเมินผลกระทบต่อสุขภาพโดยชุมชนไม่
มีอิทธิพลต่อความเชื่อมั่นในสถาบัน และไม่ลดความขัดแย้งระหว่างกลุ่มผู้ได้เสีย ผลวิจัยประการ
สุดท้ายคือ จะเป็นการด่วนสรุปถ้าจะบอกว่า (๑) การมีส่วนร่วมของสาธารณะภายใต้การประเมินผล
กระทบต่อสุขภาพโดยชุมชนนั้นสามารถผนวกคุณค่าของสาธารณะไว้กับการตัดสินใจได้อย่างแท้จริง
และ (๒) กระบวนการการประเมินผลกระทบต่อสุขภาพโดยชุมชนได้ปรับปรุงคุณภาพในการตัดสินใจได้
อย่างเพียงพอ

สาขาวิชา การพัฒนาระหว่างประเทศ ลายมือชื่อนิสิต_____

ปีการศึกษา 2553 ลายมือชื่อที่ปรึกษาวิทยานิพนธ์หลัก_____

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STEVEN SIBLESZ: AN ANALYSIS OF PUBLIC PARTICIPATION UNDER COMMUNITY HEALTH IMPACT ASSESSMENT OF THAILAND: THE CASE STUDY OF BAN NA NONG BONG GOLD MINING PROJECT, LOEI PROVINCE. THESIS ADVISOR: ASSISTANT PROFESSOR SURAT HORACHAIKUL, 100 pp.

Health impact assessment (HIA) is a relatively new concept within the Thai policy-making arena. From a human security perspective, the HIA has the potential to be a practical tool to empower local communities in protecting their health. One important element of the HIA is the process of public participation. While the HIA mechanism requires public participation at various stages of the process, the risk remains that the effect of public participation on the final HIA-outcome is limited.

The research at hand investigates the case of the gold-mining project in Ban Na Nong Bong, Loei province, where a community HIA was recently conducted. Using a five-social-goals research framework, the research assesses the usefulness of public participation under HIA in Thailand. Research findings show that public participation under HIA significantly *educates and informs the public*, the primary goal of community HIA. On the other hand, the findings suggest that the community HIA does not influence levels of *trust in institutions*, nor *reduces conflict* between stakeholders. Finally, it is too early to judge whether public participation under community HIA can truly *incorporate public values into decision-making* and whether the community HIA process has *improved the substantive quality of decisions*.

Field of study: International Development Studies   Student signature: ……………

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ABBREVIATIONS

CHIA	Community Health Impact Assessment
CHS	Commission for Human Security
EIA	Environmental Impact Assessment
HIA	Health Impact Assessment
HPPF	Healthy Public Policy Foundation
HSRI	Health Social Research Institute
NHCO	National Health Commission Office
THB	Thai Baht
TKL	Tungkam Ltd.
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHO	World Health Organization

1.1 Introduction

Since the end of the Cold War more than twenty years ago, South East Asia has witnessed great economic development within its borders. While the growth strategy of the region was originally focused on the promotion of export, consumption in South East Asia has grown steadily in the last decade, making the region today both a strong exporter and consumer of goods. Thailand, situated at the heart of the region, has developed into the economic powerhouse of the region.

The economic progress of the region has not been without consequences for the environment and the lives of the people in the region. While on the one hand, economic development in Thailand has provided job opportunities and improved livelihood for many, it has also created inequality in terms of distribution of economic gain between the people, the overall access to health care, recognition of human rights for all, and overall change in livelihood. To many, the "neo-liberal economic development model and the preoccupation of states with economic growth without due regard for to equity and justice [has alienated] the majority of people who are living below the poverty line" (Caballero-Anthony, 2004:167). In Thailand, many of those communities that have seen their existence threatened by economic development over the last few decades have attempted to block or force changes in the operations of major forestry operations, dams, energy plants or heavy industry projects in the last decades. For various reasons, these efforts have often failed, leaving many of the negative impacts of development to be absorbed by the most vulnerable.

1.1.1 Health Impact Assessment

Meanwhile, there is an increasing recognition that many health issues are profoundly influenced by aspects outside the traditional realm of health and healthcare. Many factors, including poverty, employment or literacy have proven to

have a direct influence on the health of human beings (Kemm, 2001, Collins & Koplan, 2009). Defined by the WHO as a "state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity" (WHO Constitution, 1948), our daily health is influenced by many factors. In order to account for the health requirements for its citizens, numerous countries have incorporated health related laws into their constitution.

Starting in the 1980s, Western countries introduced the concept of health impact assessments (HIA) to decentralize decision-making and resource allocation of the commercial sector, in order to "allow greater accountability, transparency and participation at all levels of the development process" (Phoolcharoen, Sukkemnoed and Kessemboon, 2003:56). All too often, policies aimed at guiding countries towards economic growth had caused negative health effects on local people. Initially, health impact assessments were developed within the development approach, aiming to identify and consider the potential health impacts of a policy proposal on the local population (HDA, 2002). HIA's primary output is a set of evidence-based recommendations geared to informing the decision-making process. These recommendations aim to "highlight practical ways to enhance the positive aspects of a proposal, and to remove and minimize any negative impacts on health, wellbeing and health inequalities that may arise or exist" (IAIA, 2006:235).

Policy proposals and processes are often carried out within a framework of values, goals and objectives. The Gothenburg Consensus Paper (1999), providing one of the first worldwide agreements on HIA, describes the values behind the Health Impact Assessment. Firstly, the idea of *democracy* is a central pillar of HIA, as it emphasizes the right of people to participate in a transparent process when formulating, implementing and evaluating policies that affect their lives. Secondly, *equity* is a fundamental value behind the HIA mechanism, highlighting that HIA is not only interested in considering the aggregate impact of the policy's impact, but more importantly the impact's distribution within a population group. Thirdly, *sustainable development* stresses the importance of considering both short-term and long-term objectives, as well as the direct and indirect impacts of a given policy. Finally, the *ethical use of evidence* is an important value behind the HIA process, as the use of

both qualitative and quantitative data from various sources has to be rigorous, in order to produce an assessment that truly reflects the various forms of evidence presented by each stakeholder.

Over the years, various countries adopted the HIA process in their national Constitution, thereby recognizing additional values and principles underpinning national HIA policy making. Based on the work of the National Health and Clinical Excellence (2005) and the European Policy Health Impact Assessment (2004), Thailand added three additional items to the list of values supporting the HIA process (Sukkemnoed and Al-Wahaibi, 2005). These three additional principles are: *practicability*, as the HIA should be designed appropriately for time and resources available, and also be fitting societal resources and contexts. Additionally, Thailand included the value of *collaboration*, stating that HIA should promote the shared ownership of the different stakeholders and inter-disciplinary viewpoints. The third additional value behind Thailand's HIA approach was the issue of *comprehensiveness*, in the sense that HIA should emphasize on the wider determinants of health or the broad range of factors from all sectors of society that affect the health of its population. This final issue underlines the common understanding that health is influenced by many factors outside the realm of traditional healthcare, such as was argued earlier.

1.1.2 Human security

With its potential power to give greater voice to the public, the Health Impact Assessment structure can be seen as an important instrument to safeguard the security and rights of individuals and communities. First introduced in 1993 by Pakistani's Special Commissioner at the UN, Mr. Mahbub Ul Haq, the concept of human security emphasizes the fact that security of individuals cannot be safeguarded when security is primarily seen as threats on the national level. Instead, real security can only be maintained and enhanced if the referent of security is the individual itself (CHS, 2003). Besides economic, food, environmental, political, community and personal security, the paradigm emphasized the importance of *health security*. It argues that

health risks, including chronic diseases, malnutrition, poor access to clean water and sanitation are major sources of insecurity for individuals worldwide. These health risks and associated feelings of insecurity are particularly high in the poorest regions of the world, but also apply to marginalized people in developed countries, including Thailand.

Within the context of existing paradigms, human security should be perceived as an addition to human development, in the sense that development cannot truly take place when fear of economical, political or health insecurity still exists. To phrase former Secretary General of the United Nations Mr. Kofi Annan, "human security in its broadest sense embraces far more than the absence of violent conflict. It encompasses human rights, good governance, access to education and health care and ensuring that each individual has opportunities and choices to fulfill his or her potential… Freedom from want, freedom from fear, and the freedom of future generations to inherit a healthy natural environment—these are the interrelated building blocks of human—and therefore national security" (Annan, 2000). Over the last decade, global health issues have been increasingly drawn into the human security debate (Chen and Narasimhan, 2003; Caballero-Anthony, 2004). This increased recognition is highlighted by the fact that four of the eight UN Millennium Development goals focus on health attainment — reductions in infant, child, and maternal mortality, combating HIV/AIDS, and malnutrition. Through its structure, human security emphasizes emancipation and decentralization of power, and recognizes that "national security approaches are often insensitive to cultural differences within the state" (Acharya & Acharya, 2001). Thus, more autonomy and empowerment should be provided to individuals and communities, recognizing that development is not a top-down process initiated by the national government, but just as much a process initiated and conducted by grassroots movements. Providing communities with adequate tools to influence and improve their own health is an important aspect of that understanding.

Good health is both essential and instrumental to achieving human security, given that protecting human lives is at the very heart of security (CHS, 2003). The Commission on Human Security (2003) recognizes that good health is a precondition

for social stability. As such, conflict and humanitarian conflict, global infectious diseases, and poverty and inequity are all threats to human security, as they lead to illness, injury, disability and death. The Commission argues that the above three categories of health threats are among the most significant threats to overall human security. With respect to fighting the consequences and origins of this third category *(poverty and inequity)*, the emergence of health impact assessments has been a promising evolution.

In several ways, the HIA mechanism can be seen as a protective mechanism of human security, as it allows individuals and communities to have a direct influence on industrial projects around them, adding to the feeling of economic, political, environmental or health security. As such, allowing decentralization of decision-making and empowerment through the HIA system support common beliefs about equality and peace for all individuals.

So far, the theoretical framework behind the HIA and its potential positive implications for people all seem to favor a progressive implementation of the concept. However, experience in many countries has shown that the proper realization of an HIA is far more complex than its theoretical counterpart. For one, while many argue on the importance of a larger role of affected communities in the decision making process through HIAs, a fundamental discussion persists on exactly how this process of public participation should be framed. Due to "incomplete knowledge and information, limited time and resources and the inequalities that result, social exclusion and mistrust often fogs the health impact assessment process" (Phoolcharoen *et al,* 2003).

1.1.3 Public participation under Health Impact Assessment

With new types of impact assessments being developed, focus has shifted from measuring and monitoring the technical aspects on health, to building a holistic approach of measuring health outside the traditional realm of health and healthcare. When compared to the environmental impact assessment (EIA), the health impact assessment has shifted attention to the people of local communities as primary

contributors. Consequently, finding appropriate methods of "extracting" associated information on health from involved communities has become a new topic of (academic) attention. Cameron, Ghosh and Eaton (2008) identified the People Assessing Their Health (PATH) process, through which local communities develop their own vision of a healthy future, design the health impact tool, and finally put it in practice. This process, originally developed in Nova Scotia (Canada), involves putting together people from many sectors of society aiming to foster networking within and between communities. They authors identify three central elements when it comes to communities designing their own health impact assessment tool. First of all, sufficient *funding* is required to allow the process to be conducted thoroughly. Secondly, adequate *administrative support* is needed, as the assessment of a number of health issues remains based on data and information needed for decision-making. Finally, high-quality *facilitation* is essential for this process to be conducted well, since the elements that encompass health often need to be elicited from local communities.

In Thailand, among others, the PATH concept has been taken up by relevant political bodies and HIAs are currently performed at three different levels. The idea that people assess their own health (i.e. the PATH process) laid the foundation for the first level of HIA: the *community HIA* (CHIA). The primary belief behind a CHIA is that people of a community know a lot about what makes and keeps them healthy. Through this process that is entirely community-focused, members become active participants in the decisions that affect the well-being of their community. According to the National Health Commission Office (NHCO) report of 2008, the CHIA concept "was born of the NHCO's attempt to revive local communities' traditional HIA processes and integrate them into the national HIA". After finishing the CHIA, the NHCO expects the communities to use the outcomes in the prevention and solution of health problems deriving from public policies. Communities that are most interested in learning the know-how to assess health impacts are those communities already adversely affected by development projects, as well as those expected to be affected in the near future.

The second type of HIA that is performed in Thailand is the HIA at *project level*. These HIAs are done prior to the start of a new project, and involve all

stakeholders. The Thai media in 2010 focused significantly on this type of HIA, when construction of new projects was put on hold in the Industrial Estate of Map Ta Phut, Rayong Province, putting huge economic interests at stake. More recently, a group of villagers in Saraburi province opposing the construction of a power plant had petitioned regulators to scrap its operating permit, claiming that among other, the HIA process had not taken place for the project (Bangkok Post, 2010). The third category of HIAs in Thailand consists of those performed at *policy level*, when new national laws need to be tested on their impact on health. For instance, when a new policy to increase agricultural exports requiring the use of dangerous chemicals is discussed in parliament, farmers and consumers can request an HIA to be conducted to assess its future impact on health.

Irrespective of the level at which the HIA is conducted, a good HIA process involves public participation. The underpinning principles of democracy, equity or accountability behind the HIA process underline this push for public involvement. As a result, public participation has been a topic of growing interest to academics, governments and regulators (Church *et al.*, 2002; Parry and Wright, 2003). Defined as "the practice of consulting and involving members of the public in the agenda-setting, decision-making and policy-forming activities of organizations and institutions responsible for policy development" (Rowe and Frewer, 2004:512), public participation is used more and more often to allow for citizens' voice in policy making. One of the main challenges of public participation is to measure its effectiveness. Up until today, there are no universally agreed upon criteria to measure the effectiveness of the process or outcome of public participation, and as a result, no widely accepted evaluation tool for public participation either. Rowe and Frewer (2004) argue why the evaluation of public participation is necessary. Firstly, they state, evaluation is important for *financial* reasons, namely to ensure proper use of public money. Secondly, it is necessary for *practical* reasons, as it allows us to learn from past mistakes. Thirdly, evaluation should be done for *moral* reasons, because it ensures that those involved are not deceived as to the impact of their contribution. Finally, it should be done for *theoretical and research* reasons, as it increases our understanding of human behaviour. In order to evaluate participatory exercises

correctly, first of all, there needs to be a shared understanding of the *definition* of effectiveness. The definition chosen (or criteria selected) may be unique and project-specific, as two participatory activities may not have the same goals. Subsequently, when common understanding on the definition is reached, the effectiveness of a certain participatory program needs to be measured through interviews, questionnaires or through other data collecting methods. Finally, one needs to analyse how successfully these different effectiveness criteria were met.

A number of frameworks to evaluate public participation have been developed over the last three decades, all of them defining effectiveness of public participation in their own separate way. Among others, Bickerstaff and Walker (2001) proposed an evaluative framework which comprised process criteria such as inclusivity, transparency, interaction and continuity, asserting that in the case study performed, participation had impacted specific areas of the plan. Moro (2005) argued that for a participation process to be successful, it must (1) add value to policy making, (2) empower citizens, (3) improve social trust and social capital, (4) involve a sufficient number of citizens, and finally, (5) change the public administration's way of managing public affairs. Other proposed evaluation frameworks differ in the criteria selected, but many stress the importance of including items such as representativeness, impact on decision and transparency (Petts, 1995; Bickerstaff and Walker, 2001). Overall, the literature review suggests that the chosen criteria include both measures of process and outcome, and that criteria can be chosen to evaluate social goals or (highly technical) process goals.

One of the most interesting frameworks that assesses whether a number of social goals are met, is the framework proposed by Beierle (1998). The framework recognizes that ''all too often, opportunities to correct mistakes or find innovative solutions go unexplored, policy makers inadequately consider public values, and a culture of mistrust in agencies is deeply rooted'' (Beierle, 1998:7). In order to measure the impact of public participation on these social values, the framework proposes the following six social goals:

> ➢ Educating and informing the public,
> ➢ Incorporating public values into decision-making,
> ➢ Improving the substantive quality of decisions,
> ➢ Increasing trust in institutions,
> ➢ Reducing conflict, and
> ➢ Achieving cost-effectiveness.

The main argument to measure social goals of a public participation activity is that these goals "transcend the immediate interest of parties involved in the process" (Beierle, 1998:5). Thus, measuring social goals allows us to look at the process from an unbiased position and determine to what extent participants feel that progress was made which benefits the regulatory process as a whole.

All things considered, the health impact assessment tool can be seen as a promising mechanism for improving the health conditions in our society. By implementing health regulations that each citizen can benefit from, a sound contribution to the progress of human security is made. However, given the difficulties of implementing the HIA, notably due to the practical challenges involved with the use of public participation, there is a strong need to conduct further research as to which aspects of the HIA process are vital to its success. Using "social goals" to measure the effectiveness of the public participation seems particularly relevant, given the values of equity, democracy and collaboration underlying the HIA structure.

1.2 Research questions

Given the current discussion on the impact and effectiveness of HIA in Thailand, the importance of health for human security and the role of public participation within the HIA process, the following <u>research question</u> will be examined:

"What is the effectiveness of public participation under HIA in Thailand, and how does this shape the overall effectiveness of HIA in Thailand?"

While the main objective of this research is to measure the effectiveness of the process of public participation under HIA, further information about the HIA process will help us to answer the following <u>additional research questions</u>:

"What are the success factors of a community HIA process according to the local community?

"Which lessons can be learned from the community HIA examined, that allows other health-affected communities in Thailand to benefit from their experience?"

1.3 Definitions of key concepts

The following key concepts form the core of this research. In order to facilitate a better understanding, the corresponding definitions are provided in this section.

<u>Health Impact Assessment (HIA)</u>: "a method of assessing the health impacts of policies, plans and projects […] using quantitative, qualitative and participatory techniques. HIA helps decision-makers make choices about alternatives and improvements to prevent disease/injury and to actively promote health. (WHO definition)

<u>Community Health Impact Assessment</u>: "[a specific type of HIA aimed at] increasing public understanding of the determinants of health and empower citizens to play an active part in decisions influencing their health. (Mittelmark, 2001)

Public values: "the norms and principles of those individuals that are primarily affected by policies and legislation. In this research, public values should be understood as the way the villagers of Na Nong Bong perceive the importance of their natural environment, personal and group health, and other norms regarding their everyday life". (Own definition)

Public Participation: "A set of deliberative mechanisms of the public at a number of different levels, […] as to guarantee the influence of the public in policy formation" (Rowe and Frewer, 2004)

Effectiveness: "The effectiveness of a public participation process indicates to what extent the set of goals were achieved. It provides an indication of the quality of the process and whether or not the exercise was a success". (Own definition)

1.4 Research Objectives

The research at hand has a number of distinct objectives:

➢ To measure the effectiveness of the current participatory process under HIA in Thailand

➢ To identify additional criteria of effectiveness of the process, according to local communities.

➢ To assess whether the current HIA in Thailand sufficiently incorporates the interests of local communities, both within the process and outcome.

➢ To analyze the strengths, weaknesses and success factors of the current HIA process for Thailand, in order to make practical recommendations for the future.

1.5 Research methodology

1.5.1 Research framework

Selecting the criteria to measure the effectiveness of a public participation process all depends on the goals the program aims to achieve. Since goals differ from program to program, "measuring effectiveness is not an obvious, unidimensional and objective quality" (Rowe and Frewer, 2004). Therefore, let us return to the theory the community HIA and identify the goals it aims to achieve.

The primary goal of a community health impact assessment, Cameron *et al.* (2008) identified, is to empower local communities through the building-up of relevant knowledge. This is a fundamental first step in the process and the basis from where the community will then be able to participate in the policy-formulation process. Thus, measuring the extent to which the community HIA provides information and knowledge to the community should be the first criteria of the evaluation model.

Unfortunately, the CHIA model does not clearly specify other goals it aims to achieve. However, as the community HIA is part of the larger HIA-family, let us review the general goals of the HIA and assess to what extent the community HIA was able to achieve significant progress on these goals. To start with, HIA in Thailand should lead to the development of healthy public policy and act like a health protection mechanism, according to Sukkemnoed, Poolcharoen and Nuntavarakarn (2006). This implies that the HIA process should allow for the views of the public to be incorporated in legislation and policy making, when these policies impact their health. As these public values can only be incorporated into the decision-making, we need to measure two separate goals: (1) to what extent the substantive quality of decision is improved as a result of the community HIA process, and (2) whether public values are really incorporated into the decision-making. Public values in this context are the norms of those individuals that are primarily affected by policies and legislation.

Another intended role of the HIA mechanism in Thailand is its function of conflict resolution tool. This should be understood as its capability of bringing parties closer to each other when conflicts over a project exist. Related to the issue of conflict is the concept of trust. On the one hand, higher levels of trust can potentially bring parties closer to solving the conflict. On the other hand, solving a conflict usually leads parties to trust each other more on future issues. Therefore, the research framework will measure to what extent the public participation process under health impact assessment (1) has increased trust of the communities in institutions, and (2) whether it was able to reduce the conflict between the various stakeholders.

In summary, the current research thus uses the following 5 criteria or goals to assess the effectiveness of public participation:

➢ Educating and informing the public,
➢ Incorporating public values into decision-making,
➢ Improving the substantive quality of decisions,
➢ Increasing trust in institutions,
➢ Reducing conflict.

The research at hand thus makes use of the first five criteria proposed by Beierle (1998). The final criterion proposed by Beierle, achieving cost-effectiveness, is left out for a number of reasons. Most importantly, it seems that measuring the aspect of cost-effectiveness is unnecessary at this point, as there is no discussion on whether public participation is needed in the HIA process. When debating about the cost-effectiveness, there is little to argue about which participatory or non-participatory approach to choose. Furthermore, given the early stages of community HIA development, it seems unjust to focus on costs at this stage yet, as the approach needs to justify itself first on producing results about education, trust and conflict reduction, which are measured by the remaining five criteria.

1.5.2 Research method

In order to study the common characteristics and discrepancies between theory and practice of HIA in Thailand, the *case study approach* is selected for the research.

The community of Na Nong Bong, in which the CHIA was conducted, has been exposed to health problems of an adjacent gold mine since 2006, which has heavily affected their health. Further information on the community and the HIA that was conducted will be discussed in Chapter 3. The case study of Na Nong Bong, Loei Province, was selected as the most suitable research area for a number of reasons.

To begin with, it should be noted that the number of HIAs conducted more or less transparently in Thailand over the last couple of years has been rather limited. This means that the availability of case studies was somewhat restricted. However, there are several positive reasons why the case of Na Nong Bong village was a suitable case study.

Firstly, the HIA conducted in Na Nong Bong was a so-called *community HIA*, which left the process fully in the hands of the community itself. This meant that there was abundant time for public participation with in the process, making it a highly interesting case given our research question.

Secondly, the HIA was conducted fairly recently, as the final report by the Ministry of Public Health was presented in the first quarter of 2010. This implies that most of the information is still fresh in the memory of the villagers.

Thirdly, the case of the gold mine in Na Nong Bong can be said to be fairly isolated from national politics (as opposed to Map Ta Phut for instance, where massive economic interests are at stake, and affected communities have fought numerous battles over the last 20 years). Therefore, the expectation was that the relevant HIA information could be obtained more clearly in Na Nong Bong, making the research findings, as a result, more relevant.

1.5.3 Data collection

The data collected during the field research is composed of a number of complementing parts.

Firstly, relevant information was collected through the process of group discussion within the affected community. Participants at these group discussions include the chair and secretary of the local "*Kloom Khon Rak Ban Koet*" committee (People Who Conserve Their Hometown), as well as a number of members of the Youth committee of Na Nong Bong. The aim of these meetings was to discuss the impact of public participation on a number of factors measuring its effectiveness, including the knowledge and information gained by the community, its impact on decision-making, and its ability to reduce conflict and create trust between the different stakeholders. Additionally, the group discussion focused on the success factors that made the HIA achieve its goal according to the local community.

Secondly, questionnaires were used to assess individual's perception of these five criteria mentioned above, as well as the success factors of the HIA process.

Thirdly, a number of interviews were held with key informants of the HIA process in Na Nong Bong, including volunteers who supported the community throughout the HIA process. Additionally, several academics involved were asked about their opinion regarding the outcome and effectiveness of the HIA process.

The methodology of this research consists of two distinct parts. On the one hand, an extensive literature review of the key concepts will be discussed, aiming not only to introduce the reader to relevant theories, but above all to provide a sound interconnection between theory and practice, preparing the reader for a transition to the second, more practical part of this research. This second part consists of a case study, in which the process and outcome of the community HIA in Loei Province is described, allowing us to draw a number of conclusions about the effectiveness of the HIA structure in Thailand.

1.6 Research Rationale

Through mechanisms such as the Health Impact Assessment, the 2007 Constitution of Thailand has made steps forward to allow the voice of people in the margin to be heard. The subsequent enforcement of these laws over the last years has been poor at best, leaving many communities in a lonely struggle to cope with the impacts on health and environment. Thus, while the theoretical argumentation behind the HIA may be sound, the practical implementation of the structure remains a challenge on its own.

Consequently, three years after its official introduction to the Constitution of Thailand, this research will assess the progress on the ground of the HIA regulation, a concept that has been introduced years ago with high expectations. Most importantly, by identifying the success factors of the community HIA experience of Na Nong Bong, other affected communities in Thailand will be able to benefit from their experience.

In addition, the evaluation of the community HIA of Na Nong Bong will demonstrate whether there is sufficient connection between the theoretical HIA structures on the one hand side and its results in practice on the other hand. Evaluations from the field will allow us to improve the theoretical part and underlying assumption. That is the second contribution of this research.

1.7 Structure

In order to measure the effectiveness of the process of public participation under HIA, and make recommendation about which factors are important for its success, the research will be structured as follows.

Chapter 2 will present the existing literature relevant to this research, including a review of the concepts of human security, health impact assessment and public participation. Subsequently, chapter 3 will discuss in detail the results of the field trip to Na Nong Bong in Loei province, including a stakeholder analysis,

presentation of the questionnaire and group discussion results, and a short summary of the main challenges of the specific field research. Based on the information presented in chapter 3, chapter 4 will provide an analysis of the findings in order to answer the research questions and assess to what extent the social goals of the research framework were achieved through the community HIA in Na Nong Bong. In addition, this chapter will propose a number of "external" success factors that increase the impact of the HIA. Subsequently, chapter 5 will provide a number of practical recommendations about the HIA process, as well as recommendations on how to reduce the gap between HIA theory and practice. Finally, the chapter will discuss topics for further research and limitations to the current research.

CHAPTER II
LITERATURE REVIEW

"Any project or activity which may seriously affect the quality of the environment, natural resources and biological diversity shall not be permitted, unless its impact on the quality of the environment and on health of the people in the communities have been studied and evaluated in consultation with the public and interested parties have been organized, and opinions of an independent organization, consisting of representatives from private environmental and health organizations and from higher education institutions providing studied in the field of environment, natural resources or health, have been obtained prior to the operation of such project or activity [...]"

(Section 67, Constitution of Thailand, BE. 2550)

2.1 Introduction

The court case of Map Ta Phut of late 2009 shows just how controversial the HIA concept and legislation in Thailand is at the moment. On the one hand, health protective mechanisms at the local level should be put in place, but just how much economic gain are we willing to give up for this? The current struggle, in short, witnesses the movement of local empowerment in apparent conflict with national economic progress. The question is whether progress can be made on both issues simultaneously, or whether they are in fact mutually exclusive.

The previous chapter has introduced a number of core concepts of this research, including the human security paradigm and the relevance of health to achieve this security. In addition, the concept of health impact assessment (HIA) was discussed and proposed as being a practical instrument for promoting human security. Finally, public participation was proposed as a key ingredient of HIA, as well as the importance of measuring the effectiveness of the public participation process.

This chapter will provide the relevant literature review of these core concepts.

2.2 Human security

The human security paradigm emerged in the 1990s mainly as a result of the end of the Cold War. While the emphasis had previously been on national security (as states were fighting other states and insecurity for humans was mainly a result of these interstate wars), a gradual shift occurred towards safeguarding the security of individuals *within* states. In the new intra-state wars that occurred mostly after the collapse of the Soviet Union, individual security could no longer be protected through reliance on military defense and national borders only. Rather, these new conflicts were often a result of ethical divisions within countries, thus requiring other methods to safeguard to security of individuals (Chen and Narasimhan, 2003, Amouyel, 2006).

2.2.1 Definition and history

Pakistani's development leader and thinker Mahbub al Haq first proposed the concept of Human Security in the 1993 Human Development Report. At the very heart of the concept, the idea of human security embodies "the security concerns of societies and where the most vulnerable can find avenues to articulate their security in their own terms without being excluded and alienated" (Caballero-Anthony, 2004:158). Alternatively, as defined by the Commission of Human Security in 2003, the objective of human security is "to safeguard the vital core of human lives from critical pervasive threats while promoting long-term human flourishing" (CHS, 2003:12). While the original definition of human security included the notion of freedom from fear through physical security of the individual (narrow definition), the concept was later expanded to include economic, health and environmental security (Acharya and Acharya, 2001).

Human security gained further attention with the improved understanding of socio-economic development that occurred in the late 1990s, noticing that the most marginalized people were still facing everyday insecurities, despite economic progress and development that (King and Murray, 2001). This changing nature of insecurity was underscored by the notion that territorial security did not necessarily ensured citizens against state or natural threats. Scholars realized that "environmental

degradation and natural disasters such as epidemics, floods, earthquakes and droughts are treats to security as much as human-made military disasters" (Ullman, 1993:124)

Human security is comprised of seven aspects of security (CHS, 2003). Firstly, it includes *economic security*, claiming that each individual should be assured a basis income, since a high rate of unemployment in many cases leads to ethical violence and political tensions. The second factor, *food security*, requires that each individual has both economic and physical access to food at all times. Thirdly, *health security*, should be achieved for each individual, as insufficient access to health services, clean water and other basic necessities are far more deadlier that any type of military conflict (CHS, 2003). Fourthly, *environment security* aims to protect individuals and communities from deterioration of the natural environment, devastations of nature and man-made threats. Fifthly, *personal security* is set to protect each individual from any form of physical violence. Sixthly, *community security* aims to protect people from the loss of traditional relationships and values within their communities. This applies specifically to the various ethnic minorities around the world. Finally, *political securities* is concerned with the basic human rights of each individual, as periods of political unrest often lead to high levels of insecurity.

While the collapse of USSR in the early 1990s gave rise to the movement of human security, the attacks of 9/11 in New York saw the re-emergence of the *national security* paradigm in many parts of the world at the expense of *human security*. As a result of religious polarization, various ethnic minority groups around the world were labeled as allies of terrorism. Figure 2.1 shows the interrelationship between the various forms of security, and which types of threat are at the core of each of these.

Figure 2.1: Situating human security as concept and discourse: Four images of security.

Attention to what type of threat

| PHYSCAL VIOLENCE | PHYSICAL VIOLENCE & NON-MILITARY |
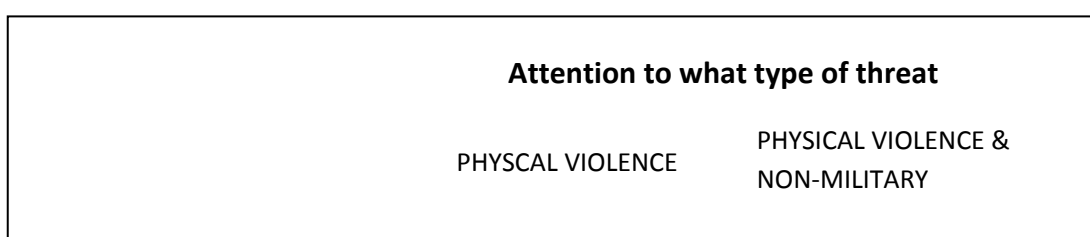
Personal security	Human security
National security	Comprehensive security

(Source: Gasper (2005), adapted from Acharya (2001))

The issue of extreme poverty, diseases, food security and environmental disasters, Caballero-Anthony (2006) argues, are security concerns for governments of each nation. Given the fact that most of these security issues affect the lives of individuals, so should security thinking be focused on the people, rather than being dominated by states' security concerns. Therefore, the issue of human security is closely linked with human development, an issue that will be discussed in more detail in the following section.

2.2.2 Human security and human development

The human development paradigm that developed in the 1980s focused on stimulating more than just economic progress in the poorest regions of the world, by expanding people's choice and capabilities in areas of health, education and technology. This more holistic approach to development came after the initial phase in which mere economic development was proposed, had failed to bring real progress to the world. Thus, "human development [aims to] widen the range of concerns beyond economic growth, […][as] it respecifies the range of concerns so that economic growth becomes seen as one potential means and not an end in itself, let alone the single or predominant end" (Gasper, 2005:242). When compared to human development, the human security paradigm offers a number of interesting interconnections between these two concepts. Firstly, as proposed by Stewart (2004),

human security should be considered as an important objective of development, since increased levels of security means higher levels of well-being, a central objective of human development. Secondly, human development is negatively affected by insecurity, because conflict often lowers access to health, education or other objectives of development. Finally, when development leads to increased levels of inequality within a specific area, it is likely to lower the level of security within that region, threatening the development of education, health and the like.

In an effort to situate human security as a concept and discourse, Gasper (2005) identifies different purposes of the human security concept in relation to human development. Firstly, human security *complements* the human development concept by a concern of stability. Both good governance and stability have been identified as crucial elements in order to achieve development in the long run. Secondly, he argues, human security *broadens* the scope of human development, as it includes the physical security of people. Finally, it *narrows* down the scope compared with the human development concept, by concentrating on the basic types and levels of goods required for securing humanity, thereby concentrating on the highest priorities.

2.2.3 Criticism of human security

Eversince the introduction of human security, the concept received considerable criticism from various corners. To some, human security is merely "old wine in new bottles", in the sense that it combines the traditional freedom of fear (political liberties) with freedom of want (economical entitlements), which, as argued before, are roughly similar to the concept of human rights (Chen and Narasimhan, 2003). To others, the broader definition of human security is "unpractical utopianism", lacking any form of "analytical rigor and clarity" (Amouyel, 2006). Neo-realists further criticized the approach for failing to show any true value in terms of concrete results, while drawing away security studies away from traditional focus (Acharya and Acharya, 2001). The concept's vagueness and breadth makes it practically impossible to prioritize policies and actions, its critics argue. It is like

putting a priority label on every bag at the airport, King and Murray (2001) added to the flow of criticism.

While the aim of this paper is not to provide a final answer the question about the uniqueness or usefulness of the human security concept, the literature review does emphasize its relevance with respect to human development. Considering the above discussion, we are inclined to agree with Alkire (2002) who suggests that human security does bridge a number of the previously discussed concepts, linking development with human rights and human needs. Gasper (2005) emphasizes the interconnections between "conventionally separated spheres" as the most important added value of the human security paradigm.

2.2.4 Human security in Asia

In Asia, states have responded with caution to this new paradigm, a standpoint that Acharya and Acharya (2001) attributed to two factors. First of all, the sovereignty of most of the post-colonial nation-states in Asia is considered a fundamental element of many nations, and there is widespread fear that human security may undermine this sovereignty. This emphasis on sovereignty is perhaps best exemplified by Art.1 of the ASEAN (Association of South East Asian Nations) Declaration which stipulates that member countries shall under no circumstance threaten the sovereignty of other member countries. Compared to its counterparts in the West, Caballero-Anthony (2004:162) argues, ASEAN's security approaches are "remarkably low-key in the sense that they emphasize the cultivation of habits of dialogue, observance of regional norms, and building of informal institutions to support these process-oriented approaches to preventing regional conflicts and attaining security". Secondly, as most of Asia's countries in general cannot be categorized as sustainable democracies, the region is not the most likely and fertile ground for anything else than the strict state-centric agenda of national security. In general, most of the continent's security challenges have occurred within each country, rather than between countries. Thus, the notion of human security is not new, but rather, it presented in a different form. Referring to human security as "the social distance between the individual and the

state", it is interesting to notice that many nations in Asia rationalize this closeness between state and individual for maintaining non-democratic rule (Acharya and Acharya, 2001).

The Asian crisis of 1997 reconfirmed the close connection between economics and security, as the fall in incomes, declining health care and education opportunities that resulted from the crisis affected a very large portion of Asia's population. The Asian crisis led to a persistent sense of insecurity with the people around Asia. The fact that national security was unable to restore the confidence through the political system underlines the importance and relevance of human security in Asia. In the end, Caballero-Anthony (2004) rightfully claims that key issues affecting the continents (including illegal immigration, environmental pollution and drug trafficking) cannot be solved by a policy consisting of only national security.

In Thailand, greater democracy and public participation in the last decade led to an increased influence of the human and social agenda (Acharya and Acharya, 2001). Human security was accepted as a meaningful concept, as the State realized that the security of its citizens could not be solely protected by state security. In the Thai perspective, human security requires political as well as economic stability. Through a variety of national policies, focus has slowly shifted to providing human security by involving individuals in the political decision-making process. The health impact assessment (HIA) legislation that was added to the Thai Constitution in 2007 can be regarded as a relevant example of this increased awareness of human security.

2.2.5 Human security and health

The issue of health has been increasingly drawn into the human security debates, because good health is both essential and instrumental to achieving human security. According to the Commission on Human Security (2003), health is instrumental to human dignity and human security in the sense that it enables people to exercise choice, pursue social opportunities and plan for their future. For this reason, the Commission has classified health as one of the seven key components of

human security, as we have discussed before. Many agree that health is more than just the absence of diseases, or as Chen and Narasimhan (2003:182) argue, "the insecurities of health, interestingly, relate not simply to preventable suffering and avoidable deaths, but also to the economic erosion of the people's precarious asset base to purchase urgent medical services. These emergencies often trigger a vicious spiral of impoverishment". Good health, therefore, is a fundamental precondition for social stability. The interrelation between human security and health is presented in Figure 2.2. The figure shows that three health challenges stand out specifically with respect to threatening human security: conflicts and humanitarian emergencies, infectious diseases, and poverty and inequity.

Figure 2.2: Human security and its relationship to health.
Global health plays a critical role in preventing and treating these unnecessary health insecurities and avoidable health crises.
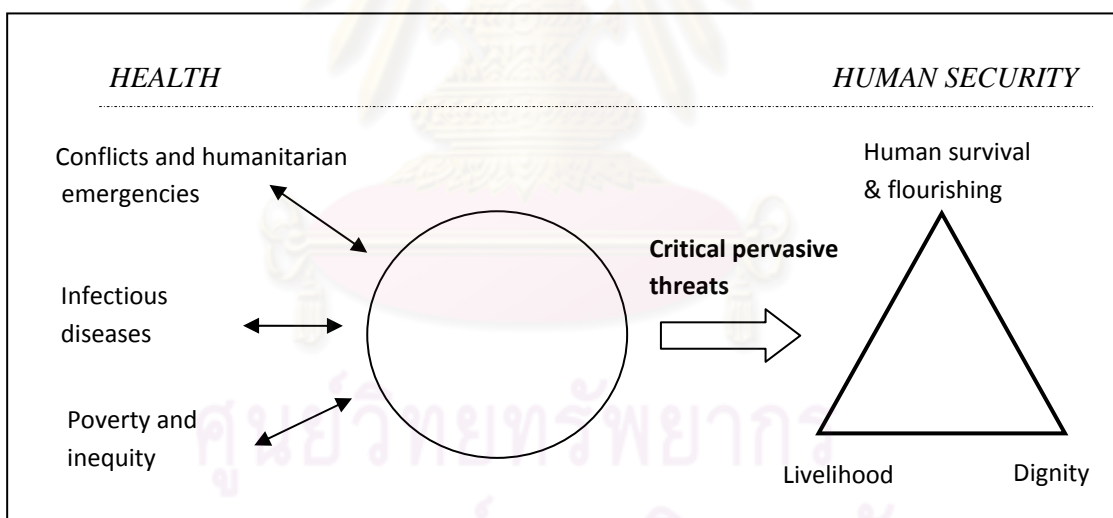
(*Source: CHS, 2003)*

The issue of *poverty and inequity* deserves our special attention, as this research aims to link specific instruments to ensure a better public health (measuring the effect of the Health Impact Assessment) with the aim of providing human security to all. While poverty and inequity are issues that occur worldwide, the catastrophic effects of the Asian Crisis of 1997 adequately showed that human security is an important issue to monitor at any time. The World Bank's Voices of the Poor in 2000

revealed that health issues such as severe illness was an essential source of worries, as the economic toll of paying for emergency health care could acutely put any family in a vicious circle of impoverishment and possibly family bankruptcy (Narayan *et al*, 2000).

With a people-centered approach to global health, much focus and attention could be put on empowerment and protection of uneducated and most vulnerable people. This new paradigm, where people are at the heart of the policy-making, can complement and strengthen state security to protect people in an unstable and interconnected world (Chen and Narasimhan, 2003). The most important gain of this new paradigm is that it allows individuals and communities to assume responsibility for their own health. These self-help strategies allow people to prevent, monitor and anticipate future health treats, essentially educates the public "to adopt healthful behavior, seek timely health services and participate in democratic decision-making to protect their own health" (CHS, 2003:103).

Given Thailand's consideration to the issue of human security, and the relationship between human security and health, the following section presents a practical mechanism to allow greater influence of communities on their individual health. This mechanism, Health Impact Assessment, has for central aim to empower local communities in protecting their health, precisely as the human security paradigm desires. The next section of this literature review will present the theoretical framework behind this HIA mechanism and discuss the practical implementation of the tool that has taken place in Thailand over the last three years.

2.3 Health Impact Assessment

2.3.1 Introduction

Concepts such as human security or human rights form the foundation of our society. Based on these principles, laws are designed and policies implemented. Frequently, it requires strong political will to implement policies and programmes that truly empower local populations. Providing individuals more ownership over important issues that affect their life can be stimulated through various ways. The mechanism of Health Impact Assessment (HIA) has to potential to bring this change to people. In Thailand, the HIA concept developed activity in recent years, aiming to deliver its theoretical promises to the people that need it most.

The following section discusses the concept, its history, promises and pitfalls, intending to create a common understanding of the HIA. In addition, feasible approaches of carrying out HIAs at three different levels will be discussed.

2.3.2 Definition and history

Over the last decades, there has been an increasing recognition that many health issues are profoundly influenced by factors outside the traditional realm of health and healthcare. Many factors, including poverty, employment or literacy have proven to have a direct influence on the health of human beings (Kemm, 2001, Collins and Koplan, 2009). Policies aimed at guiding countries towards economic growth, for instance, have often caused negative health effects on local people (Phoolcharoen *et al,* 2003). Defined by the WHO as a "state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity" (WHO constitution, 1948), our health is thus influenced by a variety of factors. Precisely because it is such a broad concept, it is frequently hard to measure as it involves a large number of aspects that are subjective in their measurement. In order to account for these health requirements for its citizens, numerous countries have incorporated health related laws into their constitution. The mechanism of Health impact assessment (HIA) was introduced to decentralize decision-making and

resource allocation of the commercial sector and "to allow greater accountability, transparency and participation at all levels of the development process" (Phoolcharoen *et al*, 2003:56). As such, health impact assessments are used as "a development approach that can help to identify and consider the potential – or crucial – health impacts of a proposal on a population" (HDA, 2002). A commitment to healthy public policy means that governments at national and local levels measure the impact on health of their policies in a consultative way and communicate these results to the wider community (Sukkemnoed, 2005). HIA's primary output is a set of evidence-based recommendations intended to influence the decision-making process. These recommendations aim to highlight practical ways to enhance the positive aspects of a proposal, and to remove and minimize any negative impacts on health, wellbeing and health inequalities that may arise or exist (IAIA, 2006).

Initially, health impact assessments were developed as an added part on the Environment Impact Assessment (EIA) process, becoming an additional approval mechanism within the broader EIA (Phoolcharoen, 2005). As such, a health impact assessment was highly technical and required sophisticated technology and expertise (Mittelmark, 2001). In an effort to become more people-oriented, the HIA subsequently involved into a tool for influencing healthy public policy, changing from an approval mechanism to a participatory learning process involving local communities all along the process. UNESCO believes that health education and promotion must focus on learning and empowerment on the community level and should include broad citizens' involvement (UNESCO, 1997). According to Cameron *et al.* (2008), "the process of creating the impact assessment tool is every bit as valuable as the use of the tool itself".

2.3.3 Principles underpinning the HIA

Policy processes are most often carried out within a framework of values, goals and objectives. According to the Gothenburg Consensus Paper (1999), one of the first important agreements of HIA, the values behind the Health Impact Assessment are fourfold. Firstly, the idea of *democracy* is a central pillar of HIA, as it

should emphasize the right of people to participate in a transparent process when formulating, implementing and evaluating policies that affect their lives. Secondly, *equity* is a crucial value behind the HIA mechanism, as it emphasises that HIA is not only interested in the considering the aggregate impact of the policy's impact, but more importantly the impact's distribution within the population. Thirdly, *sustainable development* stresses the importance of considering both short-term and long-term objectives, as well as direct and indirect impacts of a given policy. Finally, the *ethical use of evidence* is an important value behind the HIA process, as the use of both qualitative and quantitative data from various sources has to be rigorous, in order to produce an assessment that truly reflects the various forms of evidence presented by each stakeholder.

Subsequently, the various countries that adopted the HIA process in their national Constitution developed additional values and principles underpinning the HIA process. Based on the work of the National Health and Clinical Excellence (2005) and European Policy Health Impact Assessment (2004), Thailand added three more items to the list of values supporting the HIA process (Sukkemnoed and Al-Wahaibi, 2008). These three additional principles are: *practicability*, as the HIA should be designed to be appropriate for time and resources available, and also be appropriate for the societal resources and contexts. Additionally, Thailand included the value of *collaboration* to underpin the HIA principle, stating that HIA should promote the shared ownership with different stakeholders and inter-disciplinary viewpoints. The third additional value behind Thailand's HIA approach is the issue of *comprehensiveness*, in the sense that HIA should emphasize on the wider determinants of health or the broad range of factors from all sectors of society that affect the health of its population. This final issue underlines the common understanding that health is influenced by many factors outside the realm of traditional healthcare, such as was argued earlier.

2.3.4 Health Impact Assessment in Thailand

HIA development in Thailand was raised for the first time under the concept of healthy public policy during the National Health System Reform in 2000, which initiated a broader range of empowering concepts within the area of civil involvement in public policy processes (Phoolcharoen *et al,* 2003). This idea of promoting health in non-health sectors came at a time of increasing health risks due to economic development, including improper waste treatment, air pollution and pesticide contamination (Sukkemnoed, Phoolcharoen and Nuntavorakarn, 2008). While health is stated as the ultimate goal of development, in the Thai context it was redefined as a ''state of well-being in four aspects: physical, mental, social and spiritual'' (Phoolcharoen *et al*., 2003). These four categories of health can still be distinguished today in Thailand in the field where HIAs are conducted.

2.3.5 Health impact assessments at three distinct levels

In the latest types of health impact assessment, communities are leading the process and identifying the different aspects of their well-being, based on the four complementing aspects of health. Cameron *et al.* (2008) identified the People Assessing Their Health (PATH) process, through which local communities develop their own vision of a healthy future, design the health impact tool, and finally put it in practice. This process involves putting together people from many sectors of society and as to foster networking within and between communities. Developing this tool is a time-consuming, costly and above all complex task that needs clear outside guidance. In Thailand, the HIA framework (using among others the PATH process described above) aims to narrow the gap between policy-makers and local communities, thereby focusing on a strong participatory process that empowers local communities in the long run.

Given the experiences with the PATH process, HIAs in Thailand are currently performed at three different levels. The idea that people assess their own health (i.e. the PATH process) laid the foundation for the first level of HIA: the *community* HIA

(CHIA). The primary belief behind a CHIA is that people of a community know a lot about what makes them healthy. Through this process that is entirely community-focused, members become active participants in the decisions that affect the well-being of their community. According to the National Health Commission Office (NHCO) report of 2008, the CHIA concept "was born of the NHCO's attempt to revive local communities' traditional HIA processes and integrate them into the national HIA". After finishing the community HIA, the NHCO expects the communities to use the CHIA outcomes in the prevention and solution of health problems deriving from public policies. Communities that are most interested in learning the know-how to assess health impacts are those communities already adversely affected by development projects, as well as those expected to be affected in the future.

The second type of HIA that is performed in Thailand is the HIA at *project level*. These HIAs are done prior to the start of a new project, and involve all stakeholders. The Thai media in 2010 focused significantly on this type of HIA, when construction of new projects was put on hold in the Industrial Estate of Map Ta Phut, putting huge economic interests are at stake. More recently, a group of villagers in Saraburi province opposing the construction of a power plant had petitioned regulators to scrap its operating permit, claiming that among other, the HIA process had not taken place for this project (Bangkok Post, 2010).

The third category of HIAs in Thailand is the HIA performed at *policy level*, when new national laws need to be tested on their impact on health. For instance, when a new policy to increase agricultural exports requiring the use of dangerous chemicals is discussed in parliament, farmers and consumers can request an HIA to be conducted.

The fact that HIAs are conducted at three different levels is the result of Thailand's co-evolutionary approach to health impact assessment. This implies that HIAs in are not developed through one specific program, but that instead, many parties can request an HIA to be conducted without asking permission from the HSRI (Sukkemnoed *et al*, 2008). According to the authors, the characteristics of this co-

evolutionary approach are (1) the variety of its development practices, (2) the dynamics involved, (3) the interconnections between these different practices, and (4) the regulatory mechanisms within and among these different practices.

While the fundamentals behind each of these three types of HIA may not differ, their practical implementation will vary depending on which party initiates the process, the amount of stakeholders involved in the process, and the purpose of the HIA outcome. As most of the academic attention in the past has focused on the HIA conducted at *project level*, the following section describes the process of the HIA conducted at this level.

2.3.6 The HIA process

Although there is no single agreed way of doing HIA, the London-based Health Development Agency proposes a step-by-step approach to define the core elements or stages of the process of developing a health impact assessment (Sukkemnoed and Al-Wahaibi, 2005). Firstly, screening of the project should be applied, a process through which it can be decided whether to undertake an HIA or not, depending on the expected impact of the project. The second step involves scoping, a way of planning how to undertake the HIA given the specific context. Thirdly, appraisal should take place, through which we are able to identify and consider a range of evidence for potential impacts on health and equity. The next phase involves developing recommendations through public review, prioritizing on specific issues for decision-makers. Subsequently, and further engagement with decision-makers should occur, a process that aims at encouraging the adoption of the recommendations in the proposal. Finally, it is trivial that ongoing evaluation and monitoring takes place, thereby assessing whether recommendations were implemented correctly, and contributed positively to health within the community. An adapted representation of this process is depicted in Figure 2.3

Figure 2.3: The Health Impact Assessment process
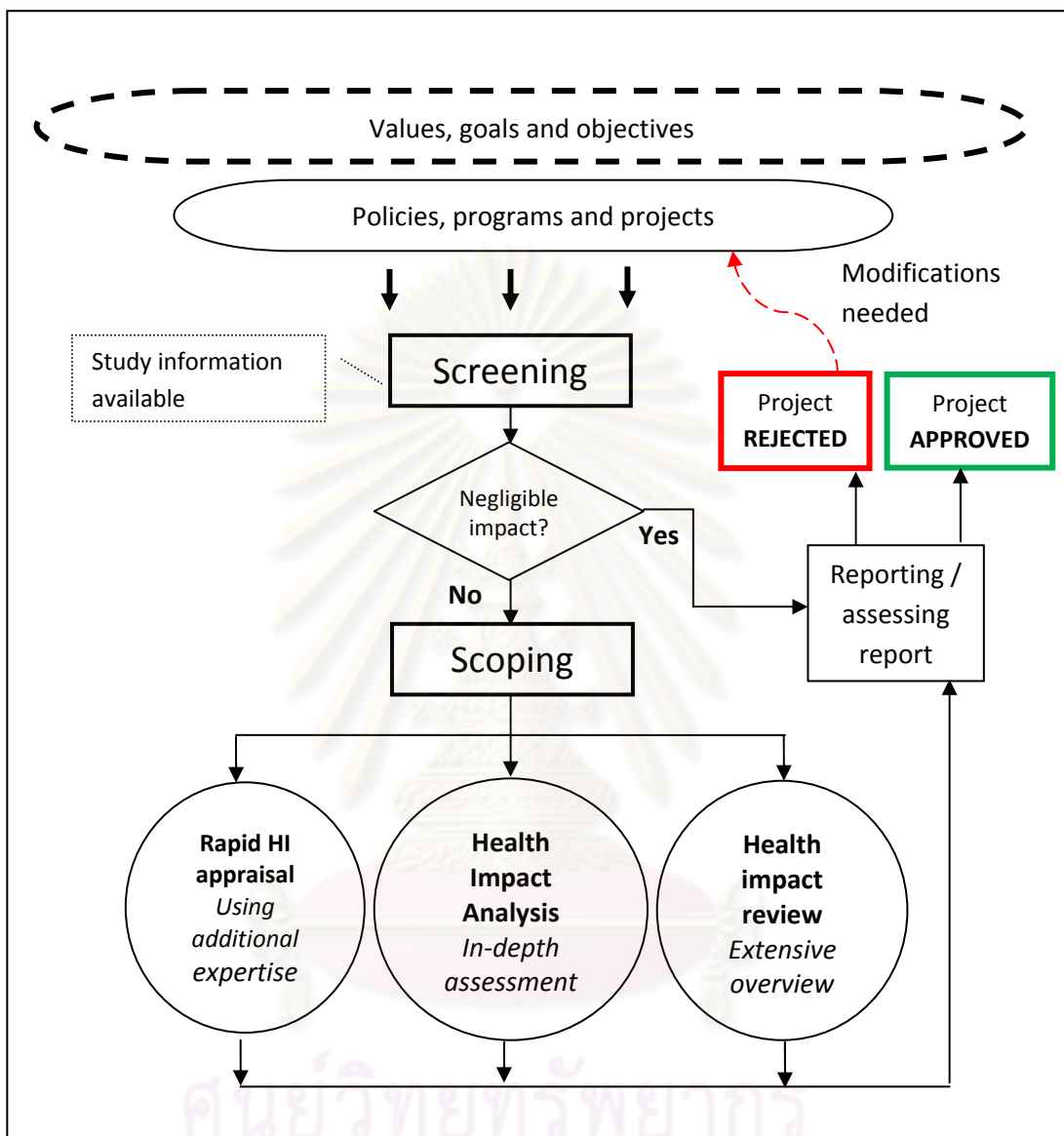
(Source: Adapted from Gothenburg Consensus Paper (1999))

2.3.7 Intended outcomes of the HIA process

Section 2.3.5 argued that as a result of the co-evolutionary approach to HIA, these assessments can be conducted on various levels. The HIA process at project level was described in the following section. Arguably, these different forms have their specific purpose and consequently, different intended outcomes. Having these different approached with each their specific origin makes it difficult for comparative studies

between HIAs. However, there are generally five main purposes of developing an HIA (Sukkemnoed *et al*, 2006:39). The health impact assessment thus serves as a:

➢ *Formal approval process*: Comparable to the EIA process; the main goal of an HIA is to use it as legal requirement process and assess whether a specific project is approved or rejected.

➢ *Health protection mechanism*: Whether the HIA is performed retrospectively or not, an important aim of the mechanism is to safeguard the health of individuals in Thailand.

➢ *Conflict resolution tool*: Especially in cases of retrospective health assessments when projects are already operating, a HIA can be regarded as part of a way to resolve conflicts between stakeholders of a specific project.

➢ *Health public policy development*: Within the broader National Health Act, the HIA mechanism can be seen as a key component of providing better health, by incorporating public opinion in policy-making.

➢ *Public awareness raising*: In terms of raising awareness through public health campaigns, there are examples in which communities have effectively used the HIA to raise awareness for deteriorating states of health.

When measuring the effectiveness of public participation, the next section will illustrate, it is important to focus on the goals that the specific program aims to achieve. The list of social goals of public participation that were proposed in chapter 1 and consequently will serve as the current research framework, are to a large extent identical to the five above mentioned purposes of the health impact assessment in Thailand.

The following section examines in more detail the process of public participation, by highlighting the specific challenges that are linked to the concept. Additionally, this section will describe the various levels of input of the community in the decision-making process and finally provide an explanation as to the necessity of measuring the effectiveness of public participation activities.

2.4. Public participation

The concept of public participation is one of growing interest to academics, governments and regulators (Church *et al*, 2002). Defined as "the practice of consulting and involving members of the public in the agenda-setting, decision-making and policy-forming activities of organizations and institutions responsible for policy development" (Rowe and Frewer, 2004:512), public participation is used more and more to allow citizens' voice in policy making. Community participation is a central ideal found in almost all the contemporary national and international declarations on health, as it may have a positive impact on the success of project development and implementation (Parry and Wright, 2003).

There may be various reasons underlying the decision to conduct community participation to include the public opinion and values in political decision-making. Preston, Waugh and Larkins (2009) identify four primary conceptual approaches to participation: (1) the *contribution* approach, where participation is seen as voluntary contributions, but where professionals lead the overall process, (2) the *instrumental* approach, that defines health as an end-result rather than a process, (3) the *community empowerment* approach that seeks to empower and support the communities, and (4) the *development* approach, which considers the participation process as an interactive, evolutionary process. The distinction between the four above mentioned approaches is all too often what "governments, health systems and organizations intend to occur, rather than what does actually occur" (Preston *et al*, 2009:5). Indeed, it may just depend from whose point of view one tries to label the approach; a health service may be seeking ideas to guide its own program (contribution approach from the government), when the community in reality aims to develop its own health program (empowerment approach from the community) (Preston *et al*, 2009).

Among the benefits of public participation, allowing people to cast their voice may increase personal confidence and self-esteem, and create a feeling that the decision-making process is community-owned (Cornwall and Jewkes, 1995; Jewkes and Murcot, 1998). Theoretically appealing, however, studying historic cases of community participation suggests that operationalizing the concept is far more difficult. Wright, Parry and Mathers (2003) argue that in general there is important

tension between the participatory and knowledge-gathering dimensions of the Health Impact Assessment. Church *et al.* (2002) label this issue the ''ladder of participation'', stating that at the lower rungs of the participation ladder are those processes in which the public is sought to be informed and educated about a particular issue. Higher on the ladder, the authors argue, are issues for which the power holders truly consult the public. At the lower levels, individuals are invited to share their ideas, however, "they are not guaranteed that these ideas will be translated into decision outputs'' (Church *et al.*, 2002:18). The authors thus agree with earlier findings from Eyles (1993) that real power-sharing does not occur until relatively high on the ladder.

Irrespective of the approach or motives underlying the involvement of public participation, the financial and time resources that are allocated to the process request for an assessment of the effectiveness of the process. Similarly, one may wish to evaluate the process for practical reasons that allow that learn from the process. Rowe and Frewer (2004) provide two more reasons of measuring the effectiveness of public participation. Evaluation should be done for moral reasons, because it ensures that those involved are not deceived as to the impact of their contribution. Finally, it should be done for theoretical and research reasons, as it increases our understanding of human behaviour.

Analysing the effectiveness of public participation may be difficult for various reasons, which Beierle (1998) calls the "differences of opinion on the nature of democracy". According to Beierle, forms of participation are required depending on the perspective on democracy that is taken. In his argument, Beierle distinguishes between the *pluralist* perspective (government as arbitrator among various organized interest groups, not as a manager of the public will), the *managerial* perspective (assigning elected representatives and their appointed administrators with identifying and pursuing the common good and popular perspective) and the *popular* perspective (which calls for the direct participation of citizens in making policy, rather than their representatives). Thus, it is critical to determine the specific goals of the public participation exercise prior to its execution and evaluation.

Over the last three decades, a number of frameworks to evaluate public participation have been developed. Each of these criteria defines effectiveness of public participation in its own separate way. Among others, Bickerstaff and Walker (2001) proposed an evaluative framework which comprised process criteria such as inclusivity, transparency, interaction and continuity, asserting that in the case study performed, participation had impacted specific areas of the plan. Moro (2005) argues that for a participation process to be successful, it must (1) add value to policy making, (2) empower citizens, (3) improve social trust and social capital, (4) involve a sufficient number of citizens, and finally, (5) change the public administration's way of managing public affairs. Other proposed evaluation frameworks differ in the criteria selected, but many stress the importance of including items such as representativeness, impact on decision and transparency (Petts, 1995; Bickerstaff and Walker, 2001). Overall, the literature review suggests that the chosen criteria include both measures of process and outcome, and that criteria can be chosen to evaluate social goals or process-related goals.

One of the most interesting frameworks that assesses whether a number of social goals are met, is the framework proposed by Beierle (1998). The framework recognizes that ''all too often, opportunities to correct mistakes or find innovative solutions go unexplored, policy makers inadequately consider public values, and a culture of mistrust in agencies is deeply rooted'' (Beierle, 1998:7). In order to measure the impact of public participation on these social values, the framework proposes the following six social goals:

- Educating and informing the public,
- Incorporating public values into decision-making,
- Improving the substantive quality of decisions,
- Increasing trust in institutions,
- Reducing conflict, and
- Achieving cost-effectiveness.

The main argument to measure social goals of a public participation activity is that these goals "transcend the immediate interest of parties involved in the process"

(Beierle, 1998:5). Thus, measuring social goals allows us to look at the process from an unbiased position and determine to what extent participants feel that progress was made which benefits the regulatory process as a whole.

2.5 Conclusion

The literature review highlighted how public participation is intrinsically linked to the health impact assessment process. Given the difficulties of implementing and evaluating public participation, there should be special focus on public participation within the HIA process. Depending on the specific goals of the health impact assessment, an evaluation framework for assessing the effectiveness of public participation can be developed.

For the research at hand, an adapted version of the Beierle (1998) framework is used to assess the effectiveness of HIA on five social goals. The literature review confirmed that the social goals of our research model are quasi-equal to the overall expected outcomes of the HIA in Thailand.

The following chapter will elaborate on the methodology, challenges and practicalities of the field research and present its main findings.

CHAPTER III
RESEARCH FINDINGS

"We are not interested in the money. What's the use of being rich and buying the products you need, while you can be poor and find all you need in the forest?"

View of a Na Nong Bong villager when asked if financial compensation can solve the conflict

3.1 Introduction

This chapter aims to describe the research findings that were obtained during the field research. The research findings will be presented within the structure of research framework, aiming to assess the effectiveness of public participation under HIA in Thailand when applied to the case study of Na Nong Bong village. As stated earlier, the five criteria framework, based on the work of Beierle (1998), measures the social goals of public participation. In addition, a number of additional factors of effectiveness that were identified during the research will be presented, each of them according to the experience of the CHIA of Na Nong Bong, Loei Province.

This chapter starts by setting the political and social context for the health impact assessment in Thailand. Subsequently, a profile and background information of the Na Nong Bong community is presented, in order to position the research finding in their accurate context. Subsequently, the data collection process will be described alongside a reflection of the main difficulties of this research. These reflections are essential to consider, as they had a major impact on the overall research that was conducted. Finally, the main research findings will be presented, each in relation to the central research framework of this work.

3.2 Setting the political and social context for HIA in Thailand

For the first time in Thai history, the 1997 Constitution allocated space for public influence in policy making. The 1997 Constitution, which in a sense could be seen as the "mother" of the 2007 Constitution, stipulated how the general public should be notified and consulted in case an economic project was likely to affect the health and local environment of communities. The Constitution of 1997, perceived as "the embodiment of the aspirations of Thai people for a democratic system of government", thus contained the first HIA legislation in Thai history (Aphornsuvan, 2004). The 1997 Constitution is said to mark the fundamental change from representative democracy to participatory democracy, and in that sense, the first Constitution in history that the Thai people have felt genuine ownership over (Dressel, 2009). Outside Thailand, the Constitution was received with positive views, as it was highly praised for its inclusion of human rights and significant advances in political reform (Aphornsuvan, 2004).

However, as much as the 1997 Constitution was a "culmination of an ambitious reform project", it also led to a rapid growth of populist centers in rural areas of the country where "representatives of a modern bourgeoisie with no connection to Thailand's traditional elites took advantage of the new institutional environment" (Dressel, 2009:318). This movement, under former Prime Minister Thaksin Shinawatra, gained particular support from the rural poor to whom resources were redirected in exchange for votes.

The 2007 Constitution was designed to continue on the road of participatory democracy that the 1997 Constitution has started, yet correcting for the overambitious constituents which Thaksin had so clearly identified. The drafting of the 2007 Constitution, which took place after the ousting of Thaksin through military coup in 2006, took place in a climate of coercion and cannot be regarded as a participatory process itself. Rather, it transferred power away from rural areas to judicial and quasi-judicial agencies with limited accountability (Ginsburg, 2009). In that sense, Englehart is probably right when noticing that "Thailand's traditional elites and even

large segments of the urban middle class obviously have little interest in expanding democratic governance beyond their own narrow circles" (Englehart, 2003:270).

It is in this light that we should see the current development of empowerment of local communities across Thailand. Although the 2007 Constitution on the one hand stimulates various forms of public participation in policy making (including section 67 requiring the use of HIA before industrial projects can be developed), the enforcement of these laws is far from being democratic, as most of the power remains with agencies with little accountability to the general public.

3.3 Community profile of Ban Na Nong Bong

The community of Na Nong Bong, situated in Thailand's Northern Province of Loei, has lived a self-sufficient agricultural lifestyle for generations. Due to its typical topography, Loei province is renowned for its moderate climate, where minimum temperatures can be close to freezing in winter, while summer temperatures do not reach the same peaks as elsewhere in Central Thailand. Thanks to this moderate climate, agriculture is an important economic sector and source of income for the people of Loei.

The village of Na Nong Bong, which comprises of the smaller Na Nong Bong Noi and bigger Na Nong Bong Yai, is about 20 kilometers outside the province's capital city, Muang Loei. Here, we find a beautiful mixed landscape of karst mountains and rice paddies. On the lower slopes of the hills, rubber tree plantations provide farmers with additional income.

Together with the village of Na Nong Bong, a total of six communities in Khao Luang sub-district have been affected by the mining activities. These villages are home to some 3500 residents in just over 1100 households that have been dependent on the Huay River and its tributaries for fish, irrigation and use of daily water use (ESCR, 2009).

The origins of the people of Loei can be traced back to the Tai Lue tribe that migrated from Lan Xang and Luang Prabang (Laos) area. While Buddhist, the people of Loei have their own important cultural and religious traditions such as the Bun Phrawet and Phi Ta Khon procession (NCHO, 2010). Ever since the establishment of the communities in the area some 60 years ago, villagers have sustained themselves through farming and gathering vegetables, thereby being hardly reliable on outside sources of food or income. Forms of agriculture that these communities have adopted are principally the cultivation of rice, corn and soybeans. Over the last decade, there has been a gradual increase in the cultivation of rubber trees, something that was inexistent in Loei province until then.

In order to supplement their income in the dry season, many villagers sell lottery tickets in nearby communities. ESCR (2009) estimates that the average income of a household with two working persons is around 120.000 THB a year. Although the use of cars is not as widespread as elsewhere in Thailand, many families own a motorbike and a *steel buffalo* that is used to work the land.

Loei province is not only famous for its tourist attractions; it also fosters a large amount of natural resources, including copper, iron and gold. In the 1990s, the Thai central government allocated many parts of Loei as gold extraction projects, making room for private companies to initiate surface and underground surveys, followed by the extraction of natural resources.

As a result, the community of Na Nong Bong found itself in the involuntary situation of having a gold mine as a new next door neighbor. In 2006, without any notice to adjacent communities, gold mining company Tungkam Ltd. (TKL) started construction of a mine site about one kilometer away from Na Nong Bong, thereby clearing large parts of the forests on Phu Thap Fah Mountain (ESCR, 2009). Ever since, the natural environment has been heavily distorted, leaving local residents with contaminated water and overall declining health. Additionally to rice fields that yield less harvest with every year that passes, many vegetables and animals previously collected in the forest for consumption are no longer accessible due to increased health risks.

3.4 Chronology of the conflict

The origin of the conflict between the community and Tungkam Ltd. goes back to 2006, when the first patches of forests were cleared on the Phu Thap Fah Mountain. However, back in 1998, TKL was already conducting an EIA on the land, and collected the signatures of unaware villagers in the process (ESCR, 2009). As a result of the EIA, TKL was granted the permission to operate a total of six mining sites in the vicinity of Na Nong Bong.

Not long after the start of the mine operation in 2006, villagers noted changes to plants health and their own health. At that point, the quality of the water had not been officially been tested, or results were not disclosed to villagers. In 2007, Rajabhat Loei University measured the water quality in Huay River in both dry and rainy season and discovered levels of cadmium, nickel, arsenic, all exceeding the maximum national standard. The local government and the mine operating company rejected the results based on the fact that these results came from a non-standard laboratory (NHCO, 2010). In early 2008, when high levels of cyanide were found in the bodies of 54 villagers after extensive health checks, the first letters of protest were sent to the governor of Loei; resulting in the deputy governor meeting with villagers. The outcome of the second cyanide test in late 2008 were never disclosed, urging more protests at the TAO Industry Office. In yet another test, the Department of Groundwater Resources in February 2009 found levels of arsenic in well at Na Nong Bong to exceed maximum levels, and thus to misfit consumption. Finally, the first provision of water by the government and TKL occurs early 2009. However, the water distributed in not enough to serve all villagers. In March 2010, 200 people gather again at the government's house and request the governor to find a sustainable solution for the water supply and to provide a sound investigation into the source of the water contamination. To this date, the issue of what causes the contamination of ground and surface water still remains unresolved. (ESCR, 2009; NHCO, 2010).

3.5 The community HIA in Na Nong Bong

The increased degradation of the environment as a result of the gold mining activities of TKL has disturbed the lives of the villagers in Na Nong Bong in many ways. With the disruption of land, water patterns and biodiversity, the health of the villagers has been under pressure in many forms. First of all, villagers noticed that their *physical health* had been affected by the adjacent mining operations. Not long after the operation of the mine started in 2006, the local community began registering the changes in their health. Villagers noticed abnormal large amount of symptoms of skin rash, respiratory diseases, nose and throat irritation, chronic wounds, tight chest, as well as cases of pain in their eyes. Most serious however were the high levels of cyanide in the blood of a large amount of people of the affected communities. Blood levels had been measured in 2009 by the local hospital of Wang Saphung, but it was later on concluded that high cyanide levels were most likely the result of cigarette smoking (NHCO, 2010). The high levels of heavy metals still remain unexplained.

In addition to the consequences of the mine of villagers' physical health, dynamite blasting at the mine, as well as the gradual bio-degradation of their environment has impacted villagers' health. Their *spiritual health* is affected due to the fact that their habit of finding their daily food in the forest and streams had now been seriously limited. Even today, the community still lives in close relationship with the surrounding environment. Furthermore, the daily blasting at the mine site, although now taking place at set times during the day, has impacted the villagers' *mental health*, as much as the noisy mining machines that operated all night long, disturbing the villagers' sleep at nighttime. After a long record of villagers' complaints, TKL recently stopped the operation of its noisiest machines at night.

Finally, mine operations have impacted villagers' life and health in a quite unexpected way. As a result of the job opportunities at the mine, there has been a strong division within the community in the sense that those villagers who work at the mine no longer speak to those people who refused to work at the mine. In religious ceremonies, this division can even be felt (NHCO, 2010). As such, the mining operations have also affected the *social* health of the community.

The above described health impacts were documented in the Community Health Impact Assessment Report that was finalized in the first quarter of 2010. With the financial support of the Ministry for Public Health and the Healthy Public Policy Foundation, as well as the help of volunteers throughout the entire process, the impacts on villagers' health have now been officially documented. The report concludes with a list of requests to the local government and mining company, regarding the changes that are necessary according to the local communities. Figure 3.1 is taken from this report and illustrates how the community has used a map of the area to locate health issues when they occur. The community leader of Na Nong Bong confirms that *"it is important to include all side-effects of the mine (bad smell, pollution in streams and rice fields, skin rash, etc), so that we accumulate evidence that supports our case at a later stage"*.

Figure 3.1: Mapping the community to locate health issues when they occur.

(Source: NHCO, 2010)

3.6 Data collection

Using various sources of data, the field research aimed to assess the effectiveness of the community HIA that was conducted in August 2010 in the community of Na Nong Bong. At the time of research, the community was in the phase of updating the assessment findings and learning about various ways in which to gain more attention and awareness for their HIA findings, and simultaneously, spread their knowledge to other communities around Thailand.

3.6.1 Research challenges

Collecting data when conducting social research is by no means an activity without challenge. It would be a missed opportunity and false interpretation of reality to describe only the useable aspects of the data collection process, thereby skipping the context in which it took place. Therefore, this section starts with a number of concerns and realities which relate to the process of data collection. The next section describes a number of these challenges.

The challenge of staying unbiased

An academic researcher has special responsibilities during his field research. This list of do's and don'ts is perhaps the longest in communities that are home to abused, traumatized or otherwise vulnerable people. While a researcher may start his field research without any specific prejudice or subjective feeling towards the issue at research (other than having a strong interest in the topic), it is likely that the personal stories that come to light during the discussions are likely to influence his perception of the situation. This shift away from a somewhat objective view toward the issue should by no means be taken lightly, as it will color the researcher's interpretation of the obtained data.

Additionally, in research settings that are polarized because of the length of the conflict, such as it is the case in Na Nong Bong, a researcher may be asked openly and directly if he supports the community's goals within the conflict or not. While this may or may not be the case, it poses an additional challenge to the researcher to

maneuver within the delicate political arena, which can be best summarized by G.W. Bush famous "You are either with us, or against us" (Bush, 2001), in which any form of neutrality towards the issue is likely to result in less information being obtained from the community.

Gaining trust of the community

Communities that have faced several years of struggle to regain their basic human rights, such as the case of the people of Na Nong Bong, become more professional in their approach to the issue in several ways. As mentioned earlier, the environmental and health concerns of the Na Nong Bong community go back as far as 2006, not long after the operations in the gold mine started. Throughout these years of struggle, and even more so since the start of the HIA process in the community, dozens of researchers have visited the community of Na Nong Bong. Arguably, this has impacted the attitude of the local community members in several ways. Among others, it has made the community more selective in who they are willing to share information with, as this is often a lengthy process to explain to newcomers about the ins & outs of the situation. For this specific research, a limited amount of time was available for the data collection. Ideally, researcher and community are able to get to know each other progressively over a period of several months in order to gain the necessary thrust. However, this field research was conducted in a period of less than three weeks. Arguably, only a limited amount of information could be obtained from the community in this relatively short period of time. Nonetheless, the researcher believes that despite this short period of time, a considerable amount of trust with the community was achieved.

Staying away from making false promises to the community

While the community over the years has witnessed a considerable amount of researchers come and go, so it has created a perception of the impact and their research, and consequently, the usefulness of providing information to researchers that visit their community. During the initial phase of the field research, I was faced with a direct question about "*what my research would bring back to the community?*". While it may be tempting to overestimate the impact of an academic research such as

this one (thus inciting community members to provide more relevant information to the researcher), I realized that the community had probably seen sufficient researchers prior to my visit, and was able to make a reasonable assessment of my work's future impact. Therefore, it is important to be honest to the community and manage their expectations.

3.7 Main findings

During the two weeks of field research in Loei province, data related to the community HIA process of Na Nong Bong was collected from various stakeholders. Data was obtained from the community through group discussions, individual interviews and written questionnaires. Outside the community, several professors from different universities were interviewed, as well as two volunteers that assisted the community members along the HIA process. In addition, the CHIA report by the Ministry of Public Health, as well as the ESCR Mobilization Report proved to be important sources of secondary data. Finally, a company visit to TKL was made in order to understand their views on the health situation of the community, and how to proceed from here.

3.7.1 Mapping the stakeholders

Throughout the process of collection information about the community HIA that was conducted, a better understanding was developed of the complex political situation surrounding the gold mine in Wang Saphung District. Generally speaking, one can distinguish seven important stakeholders in the gold mine process in Wang Saphung province. These are:

- ➤ The affected communities,
- ➤ The mine operating company Thungkam Ltd. (TKL),
- ➤ The government of Loei Province,
- ➤ Several universities in Thailand,

➤ NGOs that support community efforts for better health,

➤ Volunteers that assisted the community in the HIA process, and finally,

➤ Government organizations (GO) that provide knowledge and funding for the
   HIA process.

Figure 3.2: Stakeholders of the gold mine and community HIA process in Wang Saphung
Province.
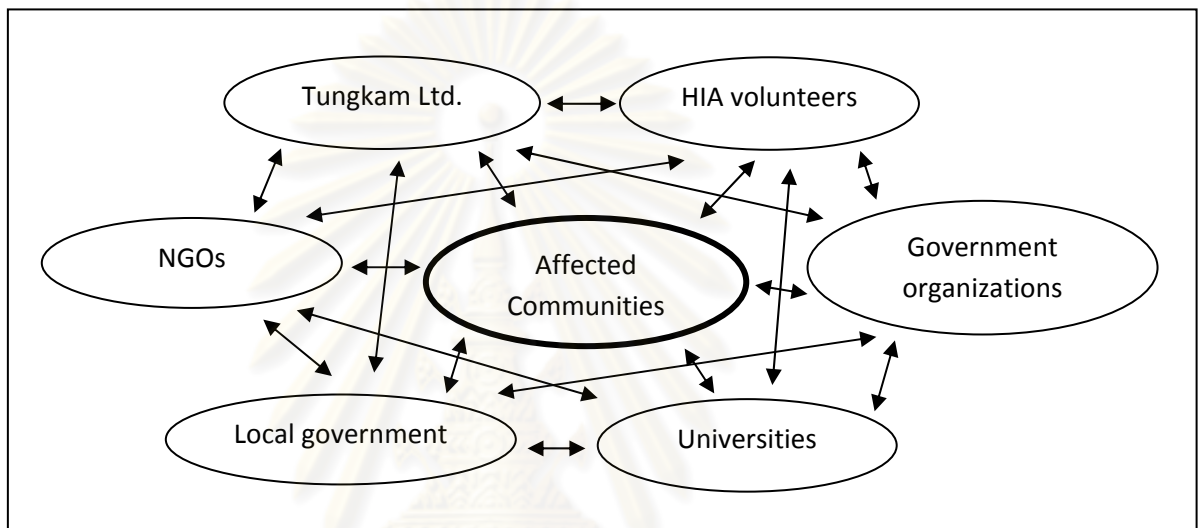
Local government

The local government of Loei authorized the operation of the mine back in
2004 based on the EIA that was performed at that time. Ever since, the EAI has been
updated several times, as the first EIA proved to be inaccurate and incomplete. From
the royalties that TKL pays to the government, 60% is divided between the various
offices at the provincial level. The remaining 40% goes directly to the Thai central
government. According to the ESCR report, royalties from TKL with a total value of
13 million THB were paid to the government in the third quarter of 2008 (ESCR,
2009). On an annual basis, this amounts to over 30 million THB for the provincial
government alone.

In relationship to the affected communities, the local government has
promised clean water to the villagers, but this promise has only been partially

delivered over the last few years, despite the protests of the affected communities at the Loei government office.

Tungkam Ltd. (TKL)

Tungkam Ltd. is a subsidiary of Tongkah Harbour Company Limited, a Thai-majority held company based in Bangkok. The current licenses for the gold mine in Wang Saphung District are valid for 25 years and up for renewal if more gold is discovered (ESCR, 2009). Rumors within the affected community say that considerably less gold was discovered than expected, putting the company in cash flow troubles at the time of writing.

The company feels that a large part of the discussion with the community about levels of cyanide and heavy metals is based on emotions, rather than on facts. According to TKL, the data analyzed by Khong Kaen University has shown cyanide levels to be below the maximum value over the last two years. Besides, TKL argues, many of the health issues are caused by smoking and the use of pesticides for a agriculture, rather than being the result of the mining activities.

Affected communities

A total of six affected communities have taken on the challenge of uncovering TKL's environmental and health pollution effects. Na Nong Bong, which is located closest to the mine, is at the centre of the effort against TKL. Additional information on the communities was provided earlier in this chapter.

NGOs

As the villagers have been quite independent in fighting the mining operation, there seems to be little involvement from NGOs in the case of Na Nong Bong. However, NGOs are active in other areas of Loei province, where the extraction of iron and copper through mining is common practice.

HIA volunteers

In the absence of NGOs, a handful volunteers have assisted the community in conducting the HIA process in 2009. These volunteers have been an important link between the community and the government organizations (such as National Health Commission Office and Healthy Public Policy Foundation) that provided the area with the necessary funding to conduct the community HIA.

Government organizations

The National Health Commission Office (NHCO) and Healthy Public Policy Foundation (HPPF) have promoted the issue of HIA on the level of national legislation for years. Through various programs, they have attempted to bring the HIA concepts to the areas in Thailand that need them most. In addition of providing financial support, they assist the affected communities in their gathering of knowledge, data and information.

Universities

Various universities have been involved in the Wang Saphung gold mine over the last decade. *Khong Kaen University* conducts sampling activities for TKL and the government to analyze the amounts of cyanide and heavy metals in the water. An affiliation of the university, the CIEE, has an active program with the community that aims to study the forming of grassroots movements in Thailand. CIEE has also played an active role in the HIA process. *Rajabhat Loei University* has several of its faculties involved in the case, but doesn't have the knowledge or equipment to carry out the data sampling and analysis that Khong Kaen University does. Instead, the university focuses on programs aiming to empower local communities around the province that are affected by various forms of industrial development. *Chulalongkorn University* is also involved in the case of Na Nong Bong, but the community has had bad experience with one of the associated professors, who recently used information obtained in the community against them.

In chapter 4, a detailed analysis of the stakeholders will be provided, in order to present the relevant context in which the community HIA of Na Nong Bong has taken place.

3.7.2 Testing the research framework

At the initial stage of the field research the impact of the community HIA was assessed using both written questionnaires and group discussions. The group discussion lasted several hours and was attended by a total of 13 villagers. From these 13 villagers, 8 completed questionnaires were returned. Additional demographic information on the 8 respondents can be found in Table 3.1.

Table 3.1: Demographics of questionnaire' respondents of Na Nong Bong.

Total number of respondents (n=)	Minimum age	Maximum age	Gender	Occupation
8	12 year old	58 years old	Male (n=3) Female (n=5)	Farmer (n=5) Student (n=3)

The following section will describe the field research findings that were accumulated through interviews, group discussion and questionnaires, using the five criteria framework to categorize the information. In this chapter, the information *per criteria* will be presented, whereas an analysis of the five criteria and their interconnection will be provided in chapter 4.

<u>*Criteria 1*</u>: *Inform and educate the public*

All eight respondents of the written questionnaire indicated that the community HIA had had a positive impact on the information and knowledge of the community about the issue of health. For the community, one of the most important outcomes was that several of the mysterious health issues affecting them had now been identified. With the increase of knowledge about health issues, villagers estimated that they were now more able to take care of themselves. As one villager said, "*Many health researchers come from outside our community, but do not understand what health really means to us. That is something that only we can define, because it concerns* our *health*".

As a result, a number of participants indicated that they felt the community was more united after the HIA process, and through this increased level of harmony

was now better able to take care of itself. Additionally, the HIA process has given weight to the health statements of the community. During the group discussion, one of the members expressed this by stating that "*At first, the head of the local health service wouldn't take our symptoms serious, but after the six communities united and showed their physical symptoms, it had a strong impact and the doctors then took us more serious.*"

Overall, the CHIA seemed to have reached its most important purpose: to empower the community by providing information and knowledge about the issue at hand, thus making the community less dependent on outside support in the future. According to one of the local volunteers of the HIA process, "*the community HIA has awakened the knowledge inside the community. The fight with the company and local government now becomes fairer.*"

Criteria 2: Incorporate public values, assumptions and preferences into decision-making

The fundamental principles on which the HIA is based include a strong belief in democracy and equity when designing public-policy. This means that the second social goal of public participation according to our research model is in a way intrinsic to the HIA itself. Consequently, it seems that in order to measure the real impact of public participation on decision-making, the *outcome* of the HIA on policy-making should be measured, rather than the *process* itself. When analyzing the process, we will realize that by conducting public participation, public values and assumptions are discussed and subsequently taken into account. The real question of course revolves around the amount of public values that is really incorporated in the decision making.

In the case of the community HIA of Na Nong Bong, judging the outcome 6 months after the publication of the HIA report, there is little evidence at this point that suggest that public values and preferences are yet incorporated into decision making, as the mining operations nearby have continued unaffected by the HIA. One villager says "*In many ways, the company is merely treating the wounds* (by providing by

water, compensation), *instead of dealing with the core issue in order to really solve the problem*" Although little can be said about the long-term impact of the HIA on decision-making at this moment, it is likely that the community HIA process has favored possible future incorporation of public values into decision-making, just because alternative public views are now available and documented.

Criteria 3: Increase the substantive quality of decision

Theory suggests that the use of public participation can also be a source of facts and innovative alternatives with respect to the issue over which conflict exists. This includes "identifying relevant factual information, identifying mistakes, or generating alternatives which satisfy a wider range of interests" (Beierle, 1998:7).

In the process of conducting the HIA, the villagers gathered the information that they thought was relevant for their health. Information about heavy metals, cyanide was gathered, as well as an assessment of the number of physical diseases that were common in the community. By doing so, they most certainly increased the substantive quality of decision.

Criteria 4: Foster trust in institutions

When the mine started operations in 2006 without any notice to the surrounding communities, the village of Na Nong Bong experienced increasing amounts of health issues over the subsequent years. Over these same years, little to no effort from the local government and Tungkam Ltd. (TKL) was received to deal with these health issues. As a result, the villagers have learned to be self-supportive in their quest for a better health. Ever since the Constitution has incorporated the concept of HIA, both TKL and the government have progressively yet hesitantly provided the village with clean water and some forms of healthcare. The community remains very though, citing that *"The Constitution really only supports economic growth in Thailand. Politicians always support those policies which offer them most economic gain"*. Thus, there is a strong sentiment in the community that the government and TKL only provide those issues that are strictly necessary according to the law. In the community, there are mixed sentiment towards the government. According to several

villagers, *"we are afraid to fight the government, because we will lose that battle"*. As such, there have been no pro-active action from either government or TKL, strengthening the community's feeling that they are alone in this battle for justice. One female villager possibly expresses the current situation best when stating that *"it is impossible for a politician to be good. You will lose the elections against a politician that offers more money for your vote"*. All things considered, quasi all questionnaire' respondents indicated that levels of trust towards the government of TKL had not increased after the community HIA was conducted.

Criteria 5: Reduce conflict among stakeholders

The issue of cyanide contamination has been a topic of long discussion between TKL and the community over the past years. While the company claims that it operates "a closed circuit in which cyanide cannot reach the rice fields or water pumps of the villagers", villagers maintain that cyanide and heavy metals are a constant source of health trouble. One of the managers of Tungkam is clear regarding the reason for the ongoing conflict: *"while cyanide levels have shown to be consistently under the maximum level for months now, this debate is based on emotions, and not on facts. We have to look at the facts* only *if we want to solve this issue"*. Elsewhere, community members insist that the local government has not taken up the health issue seriously, and by protecting the company, protects its own significant source of financial income. Overall, villagers have experienced a lack in support for their cause. An emotional villager says: *"Is gold worth human lives? Money and gold will run out one day, but the land we possess will be forever!"*.

Two villagers indicated that the level of conflict has decreased, simply because as a result of the community HIA conducted, the government has now officially been made aware of the health issues, and will consequently have to act in order not to further violate the Thai Constitution. One of the students bravely affirmed that *"the community and government now have something to talk about"*.

All things considered and similar to the argumentation on the issue of trust, the community HIA seems to have experienced little difference in the level of conflict between government and TKL on the one hand side and the community on the other.

One villager is very clear on the issue when stating that "it is impossible that the company and village will ever cooperate".

Table 3.2: Summary of CHIA in Na Nong Bong

Goal	Result
Inform and educate the public	Much information and knowledge was obtained by the local community.
Incorporate public values, assumptions and preferences into decision-making	Public values were obtained, but too early to assess whether included in decision-making.
Increase substantive quality of decisions	Additional facts were obtained, possibly leading to better decisions in the future.
Foster trust in institutions	Levels of trust unaffected by the HIA process
Reduce conflict among stakeholders	Level of conflict unaffected by the HIA process

3.8 Conclusion

This chapter has provided a examination of the villagers' perception of the HIA. To start with, it has described the political context in which the gold-mining problem and associated community HIA are set.

Secondly, this chapter presented and the data related to the central research framework of this thesis. It argued that the community HIA does well in informing and educating the community. As a result of the HIA conducted, villagers feel more empowered to tackle the issue by themselves in the future. This is clearly a very positive outcome of the community HIA. On the four other criteria of the research framework that were tested, the scores of the HIA are less evident. While, inherent to the process, the health impact assessment improves the substantive quality of decision (criteria 2), there is little evidence that these public values are subsequently incorporated into decision-making (criteria 3). Although it may be too soon after the end of the process to draw this conclusion, a failure to truly incorporate the values of the general public into decision-making could be interpreted as a failure on the most important aspect of the overall health impact assessment policy. How important is local empowerment really if no real changes are happening outside the community?

Additional thoughts on these data findings will be discussed in more detail in the subsequent *Analysis & Recommendation* chapter. In addition, the following chapter will put forward a practical outline regarding which action communities around Thailand should take when conducting successful community HIA themselves in the future.

CHAPTER IV
ANALYSIS & DISCUSSION

4.1 Introduction

Chapter 3 presented the main research findings of the field research. In this chapter, we will discuss in more detail these findings and analyze their implications for both the research framework and inference in practice. Additionally, a practical outline will be presented that can guide communities in their process of community HIA in the future. This proposed strategy outline is based on the practical experiences of the Na Nong Bong community, and aims to spread the lessons-learned to other communities in Thailand, in an effort to build a strong network that may one day challenge the existing hegemony of local government and businesses.

4.2 Stakeholder analysis

Seven main stakeholders of the gold mine in Loei province were identified and discussed in the previous chapter. In this section, we will discuss a number of these stakeholders and how they relate to one another, providing and analysis that in turn, creates the context in which the CHIA was conducted.

4.2.1. Local government & Tungkam Ltd.

Thailand has a long tradition of politics overlapping with business and vice versa. As a result, politicians have become financially dependent on the business that is conducted within their district or province. Given that some 30 million THB is paid each year in royalties by TKL to the local government, there seem to be a strong interest for the government to keep the mine operating.

According to a number of villagers that were interviewed, this intimate connection between local government and TKL is the most important reason for the community's decision to fight the battle against the gold mine independently and

without any form of outside support. One professor interviewed gave a clear example of this intimate connection: "*Last year, after having worked with a community that was heavily affected by an adjacent mine, I was contacted by someone from the local government, urging me to think twice before sharing more relevant health-data with the affected community. It shows to what extent the politicians are involved in business and what strategies they are willing to use in order to protect their financial interests*".

4.2.2. Universities & the local community

University' involvement has until today only moderately benefited the community, while it has the potential to play a much larger role in the conflict. As stated earlier, a number of universities have been active, each providing data to one or more parties involved. As a result, there is a growing disagreement over the validity of the findings that universities present periodically, depending on who you ask. Even within universities, some professors are appreciated in their work for the community, while others are not.

The influence of these academic institutions can be increased when additional knowledge sharing between them would take place. Similar to the International Panel on Climate Change (IPPC) of the United Nations, which is *the* central body on climate change data, universities involved in the gold mine case should bundle their efforts, in order to increase their common database, objectivity within the conflict, thereby becoming the much needed independent body in this conflict.

4.2.3. Local government & government organizations

Given the financial interests of the local government in the gold mine, outside support to implement the HIA legislation must thus come from elsewhere. Several government organizations have taken on the task of developing the HIA program and assisting affected communities with its implementation. Both the National Health

Commission Office (NHCO) and Healthy Public Policy Foundation (HPPF), responsible for a progressive implementation of HIA legislation in Thailand, have provided practical support in the community HIA process. It is thus somewhat strange to notice that local government and governmental agencies have opposing interests when it comes to the mining operations. A closer alignment of national governmental actions (both at the national and local level) would speed up the HIA process implementation considerably. But given the levels of corruption at the local level, it is expected that further implementation of HIA practices will be slow. In the end, if decentralization of power is really aimed for, it requires governmental bodies to function well on both local and national level.

4.2.4. Conclusion on stakeholder analysis

The most striking conclusion with respect to the political context of this situation is the double role of the government. More specifically, on the one hand side it aims to promote a healthy public policy (see Art. 67 on HIA in the Constitution), while on the other hand, it is unable to enforce these healthy public policies through local governmental bodies. By many accounts, the local government is unwilling and unable to enforce this new HIA legislation as a result of the financial interests (both declared and undeclared) it has in the gold mine.

Additionally, there seems to be no genuine cooperation between the different universities involved. Instead, each stakeholder is able to select the data and information it wishes from the various sources available, adding to the controversy whether cyanide leakages from the factory still occur or not. The option of *pooling* data from the various sources available would considerably enhance the process and provide an opening to solve the current conflict between TKL and affected communities.

The results of the stakeholder analysis are represented in Figure 4.1. It illustrates that while the Na Nong Bong community seeks to empower itself in order to benefit most from Art. 67 of the Thai Constitution (represented by the arrow

upwards), the joint efforts of TKL and the local government hinder any real change of the situation. At the same time, HIA volunteers and government organizations aim to facilitate the process of community empowerment, while the universities aspire to be independent, but possibly fragment the process even more.

Figure 4.1: Towards community empowerment: obstacles and sponsors of the community HIA process
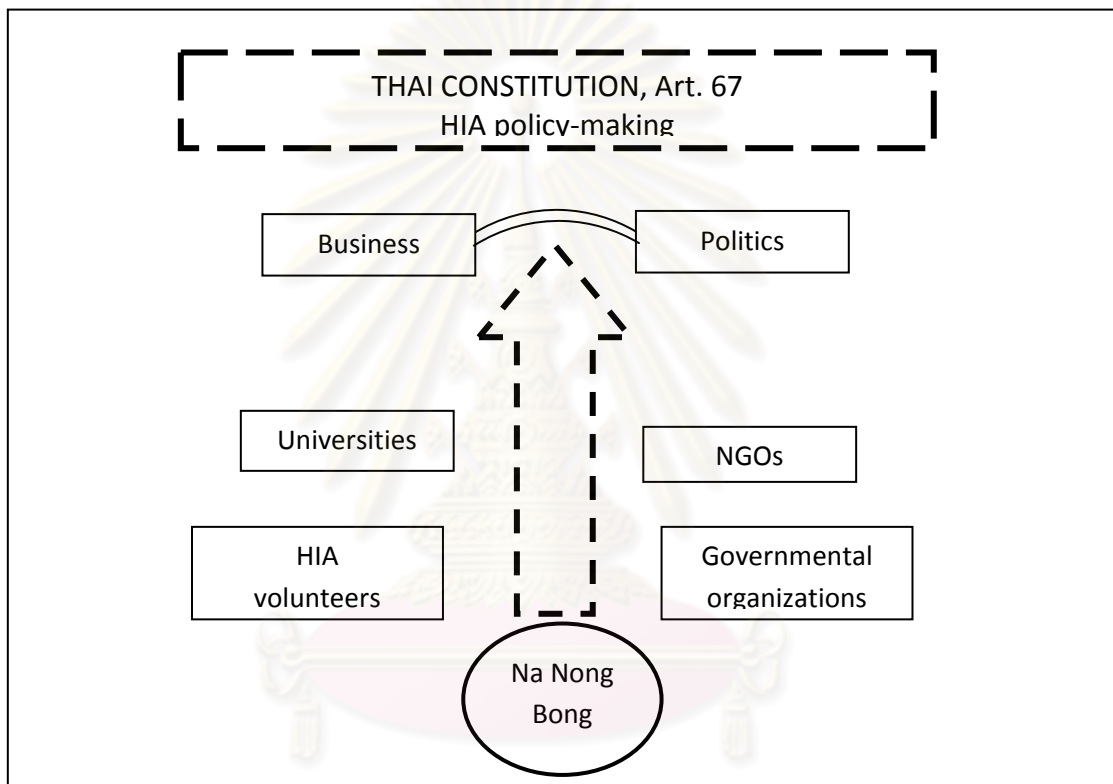
4.3 Analyzing the research framework

4.3.1 Introduction

In democratic systems, citizens have the right to participate in the decisions which affect them. In Thailand, this viewpoint was confirmed when issues of health were included in the 1997 and 2007 Constitution, and more specifically the obligation of conducting a Health Impact Assessments before industrial projects can be approved. The legitimacy of the HIA, it was subsequently argued, depends to a large extent on the amount of public participation that was applied during the process. This argument directly links back to the common understanding that democratic systems should include the voice of the public. The literature review suggested that in order to prove the effectiveness, we need to evaluate the program's process and outcome. The adapted framework of Beierle (1998) that was used to measure the effectiveness of the community HIA in Thailand aimed to do just that, by measuring five social goals of public participation.

The research findings presented in the previous chapter indicated to what degree each of the five goals were met according to the view of local community members. This section combines these individual findings and analyses the combined results.

4.3.2 Analysis

Overall, a number of conclusions can be drawn based on the research findings. First of all, it seems the most important goal of the community HIA, empowering the community through knowledge and information, was achieved. As a result of the HIA conducted, we could say that the villagers now feel better "equipped" to tackle the health issues in the future by themselves. This is clearly a positive outcome of the community HIA.

However, on the other four criteria of the research framework that were tested, the scores of the HIA are less obvious. While, inherent to the process, the health

impact assessment improves the substantive quality of decision (criteria 2), there is little evidence that these public values are subsequently incorporated into decision-making (criteria 3). Although it may be too soon after the end of the process to draw this conclusion, a failure to truly incorporate the values of the general public into decision-making could be interpreted as a failure of the overall health impact assessment policy. The question then arises then is just how much impact local empowerment really can have if no real changes are taking place outside the community.

So what are other implications of our research findings? What does it mean that only one of the five criteria is assessed to be positively correlated with the community HIA process?

Criteria 1: *Inform and educate the public*

First of all, one could claim that the only real purpose of a *community* HIA is to empower the local community. In that case, we should not be surprised to find only a positive score for this social goal, while showing mixed or negative results for the other four criteria. The HIA guidelines of Thailand stipulate that people must learn to ask the right questions and exercise their legal rights. By seeking knowledge, their rights will be used effectively (NHCO, 2008). This is exactly what the community HIA yielded in terms of practical result. On the other hand, drawing the conclusion that the additional information and knowledge is the direct result of the HIA process, may well overstate the benefits of the community HIA process. For one, the ideas behind the HIA concept are not new to communities, as villagers have been conducting HIAs for a long time. In an age where technology has challenged or replaced these traditional forms of knowledge, EIAs have replaced local communities' consulting processes, and the traditional customs became sidelined (NCHO, 2008). Thus, one should be cautious about the benefits attributed to the community HIA process. Additionally, if the HIA outcomes claim to represent the holistic approach to health, it certainly needs to include the spiritual and mental aspects of health, which have been important aspects of how villagers assessed the environment and their health prior to the introduction of EIA and HIA.

Criteria 2: Incorporate public values, assumptions and preferences into decision-making & Criteria 3: Increase the substantive quality of decision

With respect to the second and third criteria of the research framework, it is arguable that new data (accumulated by the local community) may lead to more confusion about the numbers in the short run. This seems to be the case in Na Nong Bong, where various data reports all claim different outcomes. Thus, it seems that only in the long run, the community HIA process is able to improve the substantive quality of decision if a common agreement on the available data is achieved. For now, the community remains unchanged in their position towards the mine: *"TKL most stop it mining activities right now! We want them out of here"*. On the other hand, numbers only tell a story to a certain extent. The issue with HIA is that it should assess all aspects of health: physical, mental, social and spiritual. There is a genuine risk that when the discussion on the data is not solved soon, little attention is paid to the remaining three aspects of health. All things considered, while additional data may have increased the substantive quality of decision, it jeopardizes to an extent the holistic approach that HIA intends to pursue.

Criteria 4: Foster trust in institutions & Criteria 5: Reduce conflict among stakeholders

The previous argument, regarding the different sets of data available, links in well with the issue of conflict. According to the literature, one of the fundamental principles of the HIA process is that it serves as a conflict resolution tool. However, our research findings suggest that the community HIA of Na Nong Bong did not change levels of conflict within the current impasse. Should we therefore completely dismiss the HIA process as a conflict resolution tool? Probably not, if only for the reason that the nature of the *community HIA* does not involve any interaction or communication with the company, and as such, levels of conflict cannot be expected to alter. With respect to the level of conflict between stakeholders, it is more likely that an HIA at *project level* will influence the level of conflict between the various parties, whether positively or negatively.

Similar conclusions can be drawn on the aspect of trust. Levels of trust have been extremely low between the company and the local community ever since the company started operations without any notice in 2006. During the community HIA process, there has been no additional interaction with the company, so levels of trust were unlikely to have changed. The issue of trust is particularly relevant, yet difficult to improve, in cases of ongoing discussions about projects that have been operating for years. In contrast, when HIAs are conducted for new projects (i.e. at *project level*), it is possible that the levels of trust are positively influenced by an HIA process.

4.3.3 Assessing the effectiveness of the research framework itself

There are several shortcomings to the research model that is proposed by Beierle (1998), based on the existing literature and the results of the research at hand. The following section therefore evaluates the research framework's usefulness itself.

First of all, as Parry and Wright (2003) already noted earlier that there exists a strong conflicting force between the knowledge providing and participatory aspect of public participation in health impact assessment processes. According to the authors, the public is unable to gather considerable amounts of information on health and at the same time critically add to the debate about health policies. Beierle's research model is based on this exact assumption. Why other would it try to measure the amount of information gathered during the process of public participation, while at the same time measuring the impact of public views on policy making? This is an inconsistency in the HIA literature in general and a contradiction as well in the research model of Beierle.

Secondly, the research framework insufficiently measures the process of public participation itself. Although it is not to say that we can rely on the assumption that good processes lead to good outcomes, it is important to evaluate the level of satisfaction participants had with the participatory process. For example, when participants are satisfied, they learn more, share more opinions, brainstorm on solution and engage with stakeholders more constructively (Beierle, 1998, Mindell et

al., 2004). The current research criteria thus fail to incorporate how the community has perceived the process, and whether they feel more confident now about the next steps of the process in the future. This may in fact be the most important outcome of the process.

Finally, as the social goals of Beierle's model measure rather broad aspects of public participation (such as trust, levels of conflict, information and knowledge), it is difficult to assess the validity, reliability and usability of the model. For instance, although the level of conflict may not have changed as a result of the process of public participation, the conflict may certainly have transformed in a certain direction. However, the current research model is unable to measure this change; hence, one can doubt about its usability in general. In addition, it is difficult to say whether the current model is reliable (in the sense that it measures consistently) because the model has not been used much, or at least, there are no written reports available of the use of the model in various other cases. Given that no standard questionnaire is available and interpretation of results is subjective, the validity of the model is not proven either. On a final note, it should be observed that neither one of the alternative evaluation frameworks of public participation score particularly high on reliability, validity or usability.

4.3.4 Conclusion

The framework of social goals that assessed the effectiveness of public participation under HIA in Thailand yielded mixed results. It demonstrated that the process of community HIA positively contributes to the information and knowledge gathering of the local community. However, we maintained that these benefits cannot be attributed solely to the community HIA process, since communities around Thailand conducted HIA themselves well before the official introduction of the concept in Thailand nearly 10 years ago. Additionally, research showed that levels of trust and conflict remain unchanged after the community HIA process. Given the fact that no official interaction between the community and outside stakeholders takes

place during the process, expecting improved levels of trust and a reduction of the conflict would overestimate the positive effects of a community HIA.

This concludes the analysis of our research findings when measured against the central research framework. However, while the field research's primary aim was to assess the community HIA effectiveness in terms of the five social goals, the research yielded more interesting results, somewhat outside the narrow scope of the research framework. In fact, much of the group discussion and individual interviews conducted in the community focused on the process, and more precisely on how the community had organized itself against the mining company before and during the HIA process. In order to fully understand the process and impact of the HIA of Na Nong Bong, it is necessary to investigate the various steps that the community made prior, during and after the HIA, with the aim of maximizing the positive effects of the community HIA. The following section will describe these steps as they were observed in the community. Using the experience from Na Nong Bong, a step by step strategy on how to maximize the impact of the community HIA will then be proposed, based on an inductive research methodology. It is expected that other health-affected communities around Thailand can use this strategy when conducting a community HIA themselves.

4.4 Discussion: developing a strategy for community HIA

4.4.1 Introduction

Figure 4.1 in section 4.2.4 was proposed to represent the work of the community HIA. The main idea behind the figure was to indicate that in order for the community to truly benefit from the HIA laws, a strong *bottom-up movement* is needed. This movement of empowering the community, making use of several allies (including government organization, HIA volunteers, NGOs and universities) during the process, will allow communities in the long run to truly challenge the pact of businesses and local governments. Empowerment, so it is argued, will contribute to the improved implementation of the HIA regulations proposed by the 2007 Thai Constitution. The *dashed* arrow in Figure 4.1 represents this movement of empowerment.

While the community HIA is a process that can be used to assess the health threats, it is equally interesting to assess other success factors of a community HIA. These factors, perhaps closer to the field of "social movement", create important preconditions for an HIA to be truly beneficial. Based on the findings of the field research in Na Nong Bong, the following section describes a number of critical steps. Prior to discussing these steps, it should be noted that in reality, the chronologic order in which these steps take place can differ from case to case. However, all steps are very relevant as contributing factors to the success of an HIA, irrespective of the order in which they take place.

4.4.2 A framework of community empowerment

The community of Na Nong Bong woke up one day in 2006 and realized dramatic changes were occurring not far from their village. Trees were cut and trucks passed the village at high speed. At that time, the community was not close to being as organized as it is now. When the people realized the mining company was there to stay, they organized themselves over the next several months. Unity within the village was created, although this is easier said than done. As with any other community

around the world, there is a constant struggle of keeping the community together, as the younger generations are attracted to city life, while strong community ties are most important to older generations. These struggles between generations and challenges within each generation (including addiction to games, drugs, and alcohol, social isolation of elderly and premature pregnancies), are just as relevant in Na Nong Bong as anywhere else. However, when faced with the outside threat of the gold mine, the community started the process of creating **unity of the community,** as an important starting point in their pursuit of justice.

Over the next several months, the community witnessed the gradual degradation of the natural environment and the villagers' health. In order to fight the battle against TKL as good as possible, the community decided on the **goals and strategy** that were required. In the case of Na Nong Bong, the long term goal of the community was straightforward yet complicated: to force the company to abandon its mining operations on nearby Phu Thap Fah Mountain.

The two steps described above seem fundamental in order to prepare for a community HIA. If communities request an HIA to be performed according to section 67 of the Constitution, it is likely that they have organized themselves prior to the request and have decided on the goals and strategy.

Subsequently, when the community HIA process is started, the **build-up of knowledge** becomes the next goal. The research framework demonstrated earlier that the accumulation of information and knowledge is a strong tangible outcome of the community HIA. In Na Nong Bong, one of the HIA-volunteers that assisted the community during the HIA process argue that "the biggest benefit of conducting an HIA is that it awakens the knowledge inside the community. With more active knowledge, the community is able to help itself". **Knowledge** should be understood at two levels. Firstly, it denoted all the information and understandings the community already has within its borders. This knowledge about the surrounding environment and health may have been passed on for generation. The HIA process can awaken this knowledge. Secondly, it denotes the knowledge that exists outside the community, which is needed to communicate with outside stakeholders at later stages of the

process. In order to be perceived as a solid stakeholder at later stages, it is vital to master the relevant outside *terminology* that applies to the specific health issues.

The knowledge build-up should be a combination of the knowledge that can be extracted from the community and its issues, combined with the knowledge of similar processes that have taken place in the past elsewhere in Thailand. This process of knowledge transfer constitutes the first important step towards the **creation of a firm network outside the community**. Networking is essential as it allows for better transfer of knowledge and information exchange, allowing a community to improve the process and quality of the community HIA that is to be conducted. A strong network can make further improvements to the community's strategy, based on lessons learned elsewhere.

Towards the end of the HIA process, the community needs to make plans on how to spread the knowledge acquired. This can be done directly through the network of communities, but solely sharing the knowledge within the network is insufficient. Instead, a strategy should be developed to **spread knowledge** around Thailand **using the media**. Creating (local) awareness for the issues at this stage is important. During the field research in Loei, it was a surprise to find that virtually no one in the city of Muang Loei (provincial capital, 20km away from Na Nong Bong) neither knew about the existence of the community of Na Nong Bong, nor its health-related conflict over the gold mine.

The issue of public communication is complex in Thailand, not only for the political ties that many media channels seem to have. *TV-Thai*, the only public TV channel in Thailand, however is an exception to this rule. Its programs focus on issues that matter at the community level, and as such, raise awareness of local battles for justice such as the one in Na Nong Bong. At a media-workshop that was organized in Loei at the time of research, the president of TV-Thai made an interesting comparison on how the media and the community can truly benefit from each other:

> *"A long time ago, there was a shepherd with many sheep. Every night the hungry foxes would come out from hiding and eat several sheep because they were hungry. The shepherd brought a dog to protect the*

sheep, but the dog was too small and still every night, sheep would get attacked by the hungry foxes. Then, the shepherd bought a big dog to protect the herd, but this time the dog was too sleepy to protect the sheep at night, and many were still eaten by the foxes. In the end, the shepherd decided that he should use both dogs, because they could cooperate and keep the foxes at a safe distance. He was surprised to see that together, these dogs were able to protect the herd from danger"

Consequently, the media and the community should cooperate more closely in order to protect the rights of the community. As the media is able to spread the story, the community should contact them more often to feed them with the latest news.

Throughout the entire process, it is important to make use of the **financial assistance and expertise** of the governmental organizations that promote the HIA policy throughout the country. Given the CHIAs that have been conducted around Thailand over the last couple of years, these institutions can actively support the process. In the case of Na Nong Bong, a strong mistrust for outsiders has developed as a result of a number of negative experiences with outsiders. Although this defensive attitude is understandable given the history, it is essential to keep a strong connection with outside stakeholders, such as universities, researchers and government organizations. The primary benefit is that these bodies can spread the community's story to a larger audience, thereby increasing public awareness of these clear examples of *double standards* within Thai society.

Finally, once the community has gained enough self-confidence through the HIA process and through the network it has become part of, it needs to **open up** (again) towards **the other stakeholders** of the project. In the case of Na Nong Bong, this is a very delicate issue given the history of the mining operations. The community has reacted with discontent to one of the professors' proposal to seek a *middle way* in the conflict. In Na Nong Bong, at this point, there is no space for mediation between the community and the company, for the simple fact that the community does not want to communicate with TKL, unless they decide to shut down the operations. There is a strong feeling that the community should protect itself without outside

support, even when it comes to conducting the HIA. The local translation for HIA is "เฮ็ดเอาเอง" which translates best to "do it yourself". Again, this is a valid attitude, but unlikely to lead to a sustainable long-term solution.

Figure 4.2 represents this step-by-step process of empowerment that can lead to a more effective CHIA process. As mentioned earlier, the order in which these steps are conducted is not fixed, but rather it is an indication through which important stages the community should progress to fully benefit from the community HIA process.

Figure 4.2: Strategic steps in a successful community HIA process
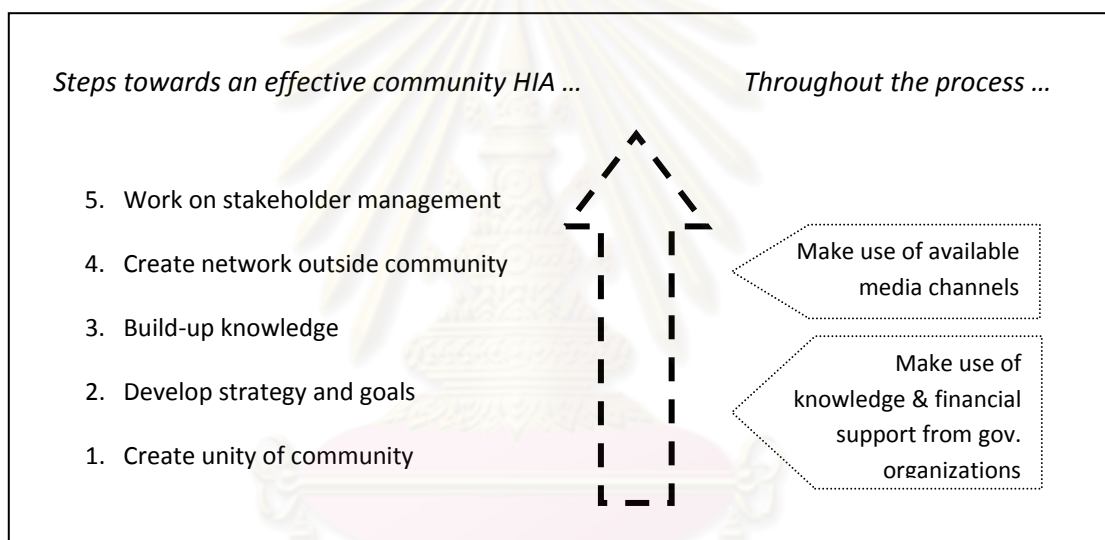
The above analysis and framework represented in figure 4.2 is the direct result of inductive research at Na Nong Bong community. This implies that no theory or framework of how social movements are build up was tested. Instead, based on our observations, it was attempted to reconstruct the most important steps in the process building up to the community HIA. The current research will not attempt to match its findings with available theoretical models. However, one concept presented by Pengkam and Sukkemnoed (2007) will be discussed, as it relates closely to the issue described above. The authors describe the concept of the "Triangle that moves the Mountain", which represents a big and very difficult problem that seems unmovable at first. As a result, it proposes three elements that complement each other: creation of knowledge, social movement and political involvement.

Figure 4.3: The Triangle that moves the Mountain.
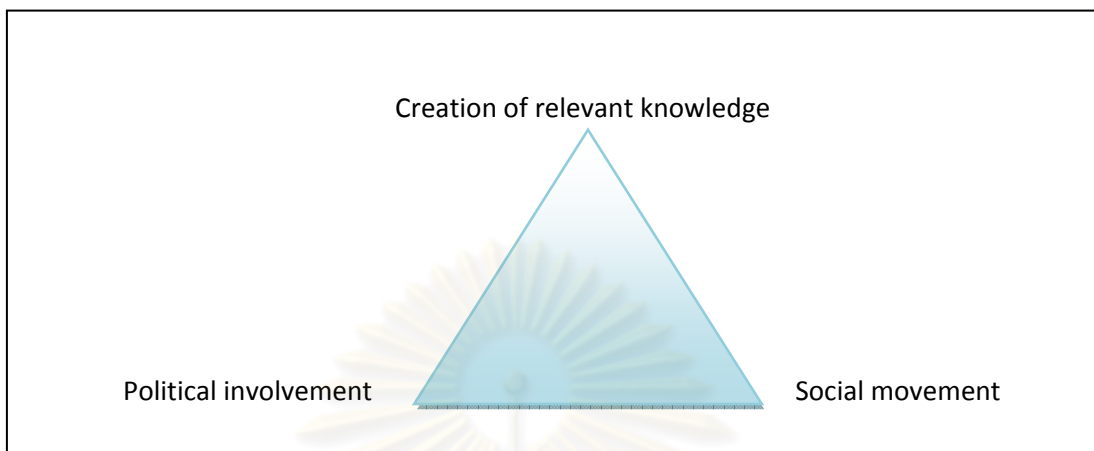
(Source: Pengkam and Sukkemnoed (2007)

The reasoning behind the triangle-concept is that the creation of knowledge is vital but inadequate by itself. It must interact with social movements through a process of social learning. Likewise, without relevant knowledge, social movements cannot gather momentum and will die unnoticed. Finally, without political involvement, the structure is incomplete and relevant knowledge and social movement will be powerless. Only when all three forces come together can there be real change and will the community HIA have true impact.

4.5 Discussion: additional issues

The previous sections of this chapter discussed the outcomes of the community HIA process in Na Nong Bong, and based on their experiences, proposed a strategy to increase the impact of the community HIA. This section deals with a number of issues and reflections that have not been discussed yet, despite their relevance in the HIA process.

4.5.1 The seven underpinning principles of HIA

To start with, let there be some reflection on how much of the seven underpinning principles was recognized during the community HIA process in Na Nong Bong. To recap, the literature identified the principles of *democracy, equity, ethical use of evidence, practicability, collaboration, comprehensiveness* and *sustainability* as the main principles behind the HIA concept (Sukkemnoed and Al-Wahaibi, 2005).

To a certain extent, promoting grassroots empowerment through HIA is a rather weak problem-solving approach. In the case of Na Nong Bong, we have witnessed the government's inability to implement HIA legislation over the last years; cases of clear environmental and health violations have remained unnoticed and unpunished. From a government perspective, it is easier and far less risky to promote local empowerment than to start the battle that is long overdue against corruption at district and provincial level in Thailand. The glass ceiling formed by the coalition between businesses and local government will keep communities losing these battles for a long period to go, unless corruption is tackled with adequate conviction. Thus, given the underpinning principle of *democracy* in HIA, there may well be a deceptive smell of democracy to the HIA process, if in reality public opinion is disregarded in the final decision making.

By conducting a community HIA, additional knowledge was gained by the villagers as to which aspects affect their health. Or rather, the knowledge was elicited from villagers and put in a "mold" that the outside world calls "health impact

assessment". In that sense, inequality of knowledge has decreased. However, the community HIA so far has not changed the distribution of health impact across the population, as the theory suggests. Again, proponents of the HIA argue that the process is just as important as the outcome of the HIA, but even they cannot deny that positive tangible outcomes are needed at some point in the future in order for villagers to feel the effects of empowerment.

In terms of collaboration, the nature of the community HIA excludes any official interaction between the community on the one hand side, and the company and local government on the other side. Therefore, it would be unfounded and inappropriate to dismiss the community HIA in terms of contributing to the principle of collaboration. However, collaboration is an vital aspect of HIA and therefore a crucial absentee within the community HIA. There are strong arguments to include interaction with the community at some point in the CHIA process, because one cannot expect a conflict to be resolved without interaction between the key stakeholders.

4.5.2. Community HIA vs. HIA at project level

The relationship between a *community* HIA and an HIA *at project level* has yet to be discussed. NHCO suggest that the community HIA "was born in an attempt to revive local communities' traditional HIA processes and integrate them into the national HIA" (NHCO, 2008b:29). In contrast, HIA at project level is performed when a proposed project needs approval to proceed. So is community HIA conducted prior to a HIA at project level, in order to sufficiently *educate* the local community when they face other stakeholders in the *real* HIA process? Is a HIA at project level likely to take place in the near future in Na Nong Bong, now that the community is ready for it? There is no definite answer yet to these questions. But a HIA without real impact on the other stakeholders is like shooting a gun without bullets; scary at first, but completely ignorable in the long run. That would be a sad end to the community efforts…

Overall, there is a strong need for a follow-up after the community HIA. The "Triangle that moves the Mountain" clearly demonstrated that fundamental changes can only occur when the creation of knowledge (through the CHIA process) is accompanied by a strong social movement and political involvement. At this point, there is insufficient proof that the CHIA can encompass all three elements. Instead, there seems to be a strong need to complement the CHIA with a formal HIA process, in which the community can exercise its knowledge, within a process that has above all more legal implications than its little brother.

4.6. Conclusion

Various important issues were discussed in this chapter. When analyzing the stakeholders of the gold mine, it was argued that due to the strong interconnection between businesses and local government in Loei province, the government is unwilling and unable to take sufficiently care of the local communities in protecting their rights in a transparent manner. Additionally, we maintained that, at this moment, the various universities involved are too scattered in their work, and as a result, and fail to be perceived as objective stakeholders. This means they cannot play a moderating role in the conflict, as universities often do elsewhere. Based on the field work solely, an inductive strategy was proposed for communities to achieve additional impact when conducting a CHIA themselves in the future. This framework was in many aspects similar to the "Triangle that moves the Mountain" model proposed by the HSRI.

The next chapter will recap these findings in order to answer the main research question investigated during the research at hand. In addition, the chapter will provide a number of recommendations, both practical and theoretical, on how to improve the HIA structure that is available in Thailand.

CHAPTER V
CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

To many people around the world, everyday life is a struggle to survive. Often, the world's most vulnerable people face the biggest threats, whether it is malnutrition, unemployment, prosecution or even death. As a result, national governments have initiated laws that aim to protect the most vulnerable in their society. For various reasons, these laws are often insufficient by nature, or poorly implemented and enforced. Therefore, many people are left on their own in their struggle for better living conditions.

Protecting and improving human health is a vital aspect of human security. The downward spiral of bad health, unemployment, violence, leading to even poorer health conditions is well-known. Good health is a basic element of life, because good health is a pre-condition for people to achieve their full potential. The health impact assessment (HIA) is a mechanism that aims to improve healthy policy-making by involving individual citizens in the process of designing healthy public policy. By decentralization and empowerment of the individual, good health becomes a responsibility of everyone.

Ultimately, this research investigated to what extent health impact assessment mechanisms contribute to better health policies in the real world. We asked the question whether people truly benefit from these health-improving mechanisms, or whether these were merely creating a false sense of democracy. Does public participation really benefit the HIA process, or are the final HIA decisions still made top-down? And if the HIA process is participatory, what are the process' success factors? This chapter will answer the main questions raised at the beginning of this research.

The research was able to draw a number of conclusions regarding the effectiveness of HIA in Thailand, based on the field research that was conducted in Na Nong Bong, Loei Province, where a community HIA had recently been conducted. The following is an overview of the research' most important conclusions:

✓ The primary tangible outcome of the community HIA is an increase in knowledge on health issues. However, the benefits of the process with regard to the increase in knowledge may be overestimated, as this knowledge is often already inside the community, and just "awakened" by the community HIA process.

✓ The community HIA process in itself does not guarantee that public values and opinions are incorporated in decision-making. Rather, an additional amount of outside political will is needed, since the community HIA has no legally binding characteristics. This should be perceived as in important shortcoming to the process.

✓ The community HIA process is found to have no impact on levels of trust between the affected community and the outside stakeholders (incl. local government and company). In addition, the mechanism does not reduce the potential or existing conflict between the community and its stakeholders.

✓ In Na Nong Bong, the overall impact of the community HIA outside the community is seriously hampered by the high levels of cooperation between the mine operating company and the local provincial government. Although a case study research cannot generalize this specific effect to HIA on the national level, there seem to be abundant examples in Thailand of "hidden resistance from above" against community initiatives, indicating that community HIAs elsewhere could be obstructed as well.

✓ "External" aspects affecting the community HIA process are equally important success factors to the outcome and impact of the process. These factors include the level of unity within the community, the community's ability to design its strategy and goals, its ability to create a network in which it gains awareness for its issues, its capability to involve various forms of media to increase this awareness, and finally, the community's ability and willingness to become politically involved.

✓ As a result of the adopted co-evolutionary approach to HIA in Thailand, HIAs are conducted at various levels, initiated by different organizations, and therefore difficult to compare. The community HIA that was investigated differs in many ways from the HIA at project level, most importantly in the amount of stakeholders it involves in the process, and the difference in terms of legal impact.

At the start of this research, several issues were identified needing closer examination, such as the process and impact of community participation on the final HIA result. Therefore, the following research question was asked:

"What is the effectiveness of public participation under HIA in Thailand, and how does this shape the overall effectiveness of HIA in Thailand?"

Research findings suggested that, by nature, the community HIA incorporates high levels of public participation, as this type of HIA is initiated and conducted by the community itself. Based on the results from the community HIA in Na Nong Bong, we found that villagers' knowledge of relevant health issues is clearly increased by the community HIA process. However, as the community HIA process has no legal power to implement the recommendations put forward by the community, the impact of community HIA outside its scope of influence is limited. A failure to enforce these recommendations is a serious limitation of the community HIA process, as demonstrates the system's inability to correctly enforce the democratic values underpinning the HIA mechanism.

Therefore, we strongly suggest that a HIA *at project* level should immediately follow-up the community HIA, in order to make full use of the knowledge acquired by the community, and increase the impact of the community HIA through the legally binding HIA mechanism at project level. Without a clear and thorough follow-up, the HIA mechanism fails to deliver its promises on democracy, equity and collaboration.

In addition to looking at the overall effectiveness of the HIA mechanism, the research examined the process success factors that positively impact the HIA, by asking the question:

"What are the success factors of a community HIA process according to the local community?

and,

"Which lessons can be learned from the community HIA examined, that allow other health-affected communities in Thailand to benefit from their experience?"

The inductive research that assessed the success factors identified several "external" factors that were important to the process' success. These steps are presented in Figure 5.1

Figure 5.1: Strategic steps in a successful community HIA process
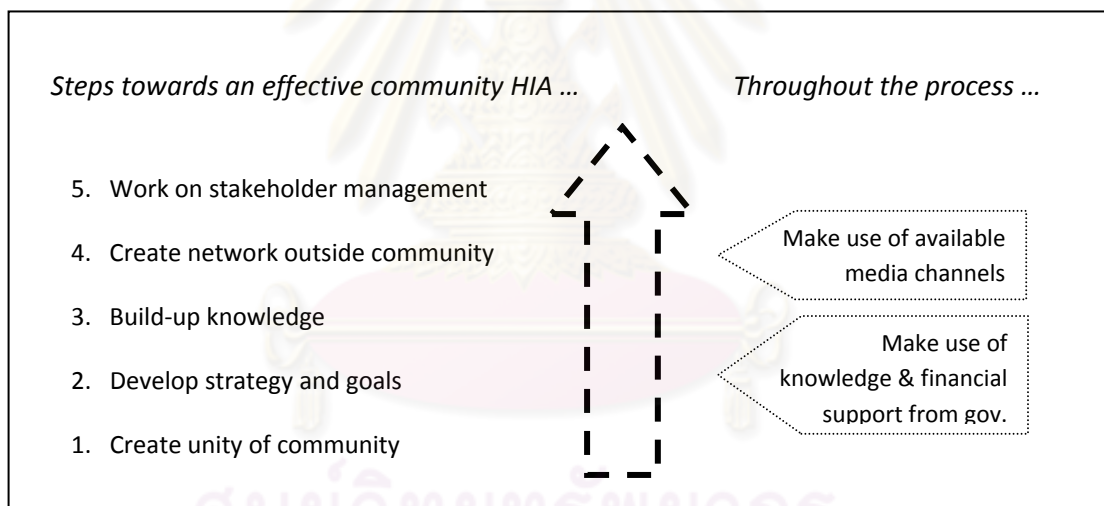
Overall, we believe that the HIA mechanism can lead to major improvements to the health of individuals if it succeeds in bringing not only knowledge and empowerment to communities, but also manages to bring changes to the current top-down political decision-making. As the "Triangle That Moves the Mountain" suggest, the full potential of HIA can only be truly utilized when knowledge build-up, social movement and political will all come together.

5.2 Recommendations

This section identifies several recommendations to improve the actual process and outcome of the HIA. In addition, topics for future research are proposed based on the findings of this research.

5.2.1 Recommendations to the community HIA process

✓ *Make the political process more transparent*. The community HIA has delivered some tangible objectives, such as the increase in health-related knowledge. However, the way to proceed from here is unclear to the community, since the local government hasn't set out any concrete process to follow-up the community HIA. In order to give the community a fair chance, the political process that follows should be made more transparent.

✓ *Follow-up community HIA with HIA at project level*. Linked to previous argument, the road on which to proceed from here is unclear or inexistent. Therefore, we suggest that the HIA at project level should succeed the community HIA process, in order for the community to make use of their knowledge.

✓ *Develop general database that combines the available information*. The universities found to be involved in the case of Na Nong Bong haven't until now provide the necessary "uniting ground" that would enable all parties to set the first step towards solving the conflict. Agreeing on the evidence and facts available would facilitate this process, and universities should take the initiative in this phase. Pooling the available data into a common database would be a important first step towards that.

✓ *Form an objective third party to facilitate the disentanglement of the conflict*. In the case of Na Nong Bong, all stakeholders have been labeled to be part of the "pro-village" or "against-the-village" camp. This means that no stakeholder is perceived to be neutral within the conflict. Creating such a party would allow the conflict to progress in the right direction.

✓ *Involve the company at one point of the community HIA process*. Involving other stakeholders into the community HIA process is not part of the community HIA at any point in the process. Although there are comprehensible arguments to support this stance, at the same time it limits the actual impact of the community HIA process. We therefore argue that, opposed to the wish of the Na Nong Bong village, the mine operating company should be involved at some stage of the community HIA process.

And finally,

✓ *Use the experience from other communities on how to organize*. The research illustrated that external factors facilitate the community HIA process to a large extent, and positively affect the impact of the community HIA outcome. Communities conducting the community HIA process in the future should make use of the lessons-learned in Na Nong Bong, as the community' way of organizing determines to a large extent the effectiveness of the HIA outcome.

5.2.2 Recommendations for future research

In order to improve the effectiveness of the HIA program in Thailand, future research should:

✓ Examine the effectiveness of public participation under HIA in the case of an HIA conducted at *project level* or *policy level*. The amount of public participation in these types of HIA can be more clearly distinguished, compared to those HIAs conducted at community level. Using the same research framework of five social goals used in the current research, the effect of public participation on levels of trust, amount of conflict and inclusion of public values into decision-making can be measured.

✓ Examine the effectiveness of public participation using the current research framework in other sectors where the community HIA was conducted. Cases

where the type of stakeholders differs significantly from the current research (for example in the case of pesticide use in orange farming) should be particularly interesting.

✓ Combine theories of social movements with HIA theories, in order to test the effectiveness-increase of the community HIA process depending on the level of community organization. As a matter of fact, there is an opportunity to learn from the organization of social movements on how to better mobilize the community. This could significantly benefit the outcome of a community HIA.

5.3 Limitations

All research has its limitations. Here is a list of the most significant limitations of this research:

✓ *Language barrier*. Despite the good translator that was available, it cannot be excluded that valuable information was hidden in the details and lost in translation.

✓ *Time limit*. Field research projects that aim to examine the effects of a certain program within a community should normally allocate a considerable amount of time to gain the trust of the villagers. The current field research was conducted in less than three weeks, and therefore does not contain the in-depth views that become available when the period of field research is significantly extended.

✓ *Width of information*. Mainly as a result of the time constraints of the field research, only the official village representatives were interviewed. Consequently, this research does not contain the view of other villagers, which may possibly disagree with some of the findings, or articulate even stronger opinions. Similarly, only villagers of Na Nong Bong Noi were interviewed for

the purpose of this research, leaving the views of the inhabitants of Na Nong Bong Yai undiscussed.

✓ *Underlying lack of trust towards outsiders.* Given the previous negative experiences with outside researchers that visited Na Nong Bong, a certain amount of self-censuring may have taken place to avoid negative future consequences, although the researcher is generally confident that the views expressed in this thesis reflect the genuine thoughts of the interviewees.

5.4 Closing statement

Globalization, far from being simply an economic phenomenon, has affected human health in various ways. The benefits of economic growth have made us sacrifice our environmental and human resources on a great scale. In our world where natural resources are limited and technological and population growth compete alongside, there is a strong need to better balance the benefits and burden of development. While many adverse factors of economic development are still being passed on to the majority of poor people, there is a growing understanding that human beings are strongly connected and that their faith in the long-term is interconnected even so.

The need for economic, social and environmental sustainability is apparent is several ways. Consumers are becoming more aware of what products they purchase, individuals and consumer groups force companies all over the world to reconsider their production methods, and we slowly but surely start to understand the human impact of our actions on the environment and wildlife. As societies develop, freedom, education and health for all have become basic rights that no one should be excluded from. Beyond a doubt, reaching adequate levels of physical, mental and spiritual health is a major goal of development. But the availability of health is still unevenly divided across the globe and, not least importantly, strongly dependent upon one's financial capabilities. While power held for centuries by elites and bourgeoisie now gradually shifts towards democratically elected governments around the world, these governments are under increasing pressure from businesses to create a climate

primarily focused on economic growth. Capitalism, in its current form, is at risk of overshooting its original promises of bringing economic growth, prosperity and ultimately happiness to the people it serves. How else can we justify the gain of gold for the lucky few at the expense of the health of so many?

Capitalism has brought us many positive things throughout the last century, but recent experiences have undoubtedly demonstrated that there is no actual *captain on the ship.* Markets, it has become painfully clear, do not possess the self-regulatory capacity many claimed it had. As a result, we need to turn again to our human capacity for creating security, well-being and happiness. Moving beyond ignorance, governments and citizens have the duty to work together and create development that makes sense for everyone.

Human security emphasizes the importance of the individual in safeguarding its own security. The individual, rather than the state, knows what's best for him. Proponents of the human security paradigm emphasize that development of countries and regions simply cannot take place unless security at the individual level is guaranteed. The concept of Health Impact Assessment underlines the belief that the individual should again be at the centre of our decision-making, both to safeguard its security and to achieve well-being. The fundamental beliefs behind the HIA demonstrate that sustainable economic development cannot take place in an environment of exploitation in which the costs of development are taken by those who benefit least. As such, it is a mechanism that tackles our common understanding that poor people should pay the price of development.

Unfortunately, executing HIAs requires strong support from governments in terms of law enforcement, as communities in general have little chance of winning against corporations when fighting alone. The notion of empowerment, covering a vast landscape of meanings, interpretations and definitions, should be understood as the strengthening of social, economic and political capabilities of individuals and communities. These capabilities include not only the build-up of knowledge but also the mastering of skills that are needed to put the knowledge into practice. It is this whole set of skills that we need to provide to those who need it. Otherwise, empowerment remains a beautiful, yet empty box of promises and good intentions.

To include legislation on HIA in the Constitution is beyond any doubt a change for the better, yet it also assigns a number of fundamental responsibilities to the government. Not only does it expect governments to facilitate the empowerment exercises at the grassroots level, it also imposes the moral obligation of correctly implementing and executing these laws to serve the people it was chosen to represent. This synthesis approach, in which bottom-up and top-down forces work towards a common goal can only bring real change if top-down actions and willingness to implement the law truly exists.

Failing to correctly implement the HIA mechanism means we fail to understand the interconnection between human beings. It means we fail to equally share the benefits of economic growth, improved health or education. It shows that we still fail to see the bigger picture of human security, development or global peace.

Can we hide behind ignorance forever?

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APPENDICES

APPENDIX A

QUESTIONNAIRE FOR COMMUNITY OF NA NONG BONG – (ENGLISH)

Dear member of the Na Nong Bong community,

My name is Steven Siblesz, I am from The Netherlands, and I study in Bangkok. From many people, I have heard the courageous work of your community against the gold mine. I really support your work and would like to learn from your work in the community, so that other communities in Thailand can follow your example in organizing themselves against the negative health effects of industries next to their communities.

Steven

The questions below ask you about your opinion on the Community Heath Impact Assessment (CHIA) that was conducted in Na Nong Bong in the last year.
A Community Health Impact Assessment is a process where the people in the village are asked to give information about their personal health. This was done during meetings in the village over the last two year.

Part 1: General information

    1. Age: ………. years old

    2. Gender: ( ) Male   ( ) Female

    3. Occupation:

Part 2: Community Health Impact Assessment

    With **Health** we mean if you have any physical or mental problems in relation to the existence of the gold mine.

    4. When was the last time that your **health** was assessed by a professional?

    Date: ……………… Month ……………… Year

    5. Do you think this should be done more often?

            ( ) Yes   ( ) No

    6. If yes, can you explain why it would help to check your health more often?

    ………………………………………………………………………………………………

7. Do you think this was a useful process?

( ) Yes ( ) No

8. Can you give 3 reasons why it was useful to have this Health Impact Assessment?

1. ………………………………………………………………………………………

2. ………………………………………………………………………………………

3. ………………………………………………………………………………………

9. After the Health Impact Assessment, do you know more about your health and what affects your health?

( ) Yes ( ) No

10. Can you explain in which ways this Health Impact Assessment has an impact **inside** the Na Nong Bong community?

………………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

11. Can you explain in which ways this Health Impact Assessment has an impact **outside** your community?

………………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

12. Do you think that after the Health Impact Assessment was done, is there more trust in the **local government** to improve your health?

( ) Yes ( ) No

Why?………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

13. Do you think that after the Health Impact Assessment was done, is there more trust in the **national government** to improve your health?

( ) Yes ( ) No

Why?…………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

14. Do you think that after the Health Impact Assessment was done, is there more trust in

Thungkam to improve your health?

( ) Yes   ( ) No

Why?…………………………………………………………………………………………

………………………………………………………………………………………………

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15. Do you think that the village meetings about the health impacts helped to lower

tensions between the **community and the government**?

( ) Yes   ( ) No

Why?…………………………………………………………………………………………

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16. Do you think that the village meetings about the health impacts helped to lower

tensions between the **community and Tungkam**?

( ) Yes   ( ) No

Why?…………………………………………………………………………………………

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APPENDIX B

QUESTIONNAIRE COMMUNITY NA NONG BONG – (THAI VERSION)

เรียน สมาชิกชุมชนทุกท่าน

ผมชื่อ สตีเว่น ซีเบรสซ์ มาจากประเทศเนเธอร์แลนด์ และกำลังศึกษาในระดับปริญญาโท สาขาการพัฒนาระหว่างประเทศ คณะรัฐศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ผมได้รับฟังจากหลายท่านถึงการต่อสู้ของชุมชนที่ได้ต่อสู้ในกรณีเหมืองทอง ซึ่งผมก็เห็นด้วยกับการกระทำของพวก ท่านและอยากจะศึกษาเรียนรู้จากสิ่งที่พวกท่านได้ทำมา เพื่อการศึกษานี้จะได้จะได้เผยแพร่ให้ชุมชนอื่นๆได้ทราบและดำเนินการตามแบบเพื่อ ต่อสู้กับอุตสหกรรมที่ส่งผลเสียต่อสุขภาพของคนในชุมชน

คำถามต่อไปนี้จะถามความเห็นของท่านเกี่ยวกับกระบวนการมีส่วนร่วมของชุมชนในการเก็บข้อมูลเพื่อประเมินผลกระทบทางสุขภาพ โดย เน้นให้ชุมชนได้เรียนรู้ เข้าถึง เข้าใจ ต่อข้อมูลของชุมชนเอง ซึ่งกระบวนการดังกล่าวได้เริ่มทำไปเมื่อปีที่แล้ว กระบวนการการประเมินผลด้าน สุขภาพของชุมชนคือกระบวนการที่สมาชิกของหมู่บ้านจะให้ข้อมูลเกี่ยวกับสุขภาพของตนเอง กระบวนการนี้ได้ทำไปแล้วในการประชุม หมู่บ้านเมื่อสองปีที่ผ่านมา

ส่วนที่ 1: ข้อมูลทั่วไป

1. อายุ .... ปี

2. เพศ ( ) ชาย หรือ ( ) หญิง

3. อาชีพ: ……………………………………………………..

ส่วนที่ 2: การประเมินผลกระทบทางสุขภาพ

เมื่อกล่าวถึงคำว่าสุขภาพ หมายถึง การที่คุณมีปัญหาเกี่ยวกับสุขภาพภายนอก หรือปัญหาสุขภาพภายในที่เกี่ยวมีผลมาจากเหมืองแร่ทองคำ

4. คุณได้รับการตรวจสุขภาพจากแพทย์หรือผู้เชี่ยวชาญ ครั้งสุดท้ายเมื่อไหร่

   วัน/เดือน/ปี ระบุ
   …………………………………………………………………………………………………..

5. คุณคิดว่าการตรวจสุขภาพบ่อยครั้งหรือไม่

   ( ) ใช่ ( ) ไม่ใช่

6. หากข้อ 5 ตอบว่าใช่ ช่วยอธิบายว่า ทำไมคุณคิดว่าการตรวจสุขภาพบ่อยดีสำหรับคุณ อย่างไร

   …………………………………………………………………………………………………

7. คุณคิดว่าการประเมินผลกระทบทางสุขภาพเป็นกระบวนการที่มีประโยชน์ต่อคุณหรือไม่

(   ) ใช่   (   ) ไม่ใช่

8. ทำไมการประเมินผลกระทบทางสุภาพมีประโยชน์ ให้คุณช่วยให้เหตุผล 3 ข้อ

A ....

B..

C..

9. หลังจากการประเมินผลกระทบทางสุขภาพ คุณคิดว่าคุณรู้และเข้าใจเกี่ยวกับสุขภาพของคุณ และรู้ว่าอะไรคือปัจจัยที่ส่งผลต่อ

สุขภาพของคุณ

(   ) ใช่   (   ) ไม่ใช่

10. ให้คุณช่วยอธิบายว่าการประเมินผลกระทบทางสุขภาพมีผลภายในชุมชน นาหนองบ้อง ในทางไหนบ้าง อธิบาย

(มีผลดี หรือผลเสีย อย่างไร หรือ ในมุมมองอื่นๆ)

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11. ให้คุณช่วยอธิบายว่าการประเมินผลกระทบทางสุขภาพนั้นมีผลต่อภายนอกชุมชนของคุณอย่างไร

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12. คุณคิดว่าหลักจากที่มีการประเมินผลกระทบทางสุขภาพเสร็จแล้ว เกิดความไว้เนื้อเชื่อใจกับองค์กรภาครัฐส่วนท้องถิ่น ในการที่จะ

ส่งเสริมการยกระดับสุขภาพของคุณหรือไม่

(   ) ใช่ (   ) ไม่ใช่

ทำไม จึงเป็นเช่นนั้น

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....
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13. คุณคิดว่า หลังจากมีการประเมินผลกระทบทางสุขภาพเสร็จสิ้นแล้ว เกิดความไว้เนื้อเชื่อใจกับองค์กรภาครัฐระดับชาติ ในการที่จะ

ส่งเสริมการยกระดับสุขภาพของคุณหรือไม่

( ) ใช่ ( ) ไม่ใช่

ทำไม จึงเป็นเช่นนั้น

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14. คุณคิดว่า หลังจากมีการประเมินผลกระทบทางสุขภาพเสร็จสิ้นแล้ว เกิดความไว้เนื้อเชื่อใจกับบริษัทตุงคำ ในการที่จะส่งเสริมการ

ยกระดับสุขภาพของคุณหรือไม่

( ) ใช่   ( ) ไม่ใช่

ทำไม จึงเป็นเช่นนั้น

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15. คุณคิดว่าการประชุมภายในชุมชนเกี่ยวกับเรื่องการประเมินผลกระทบทางสุขภาพนั้นทำให้มีสภาวะตึงเครียดระหว่างชุมชนและ

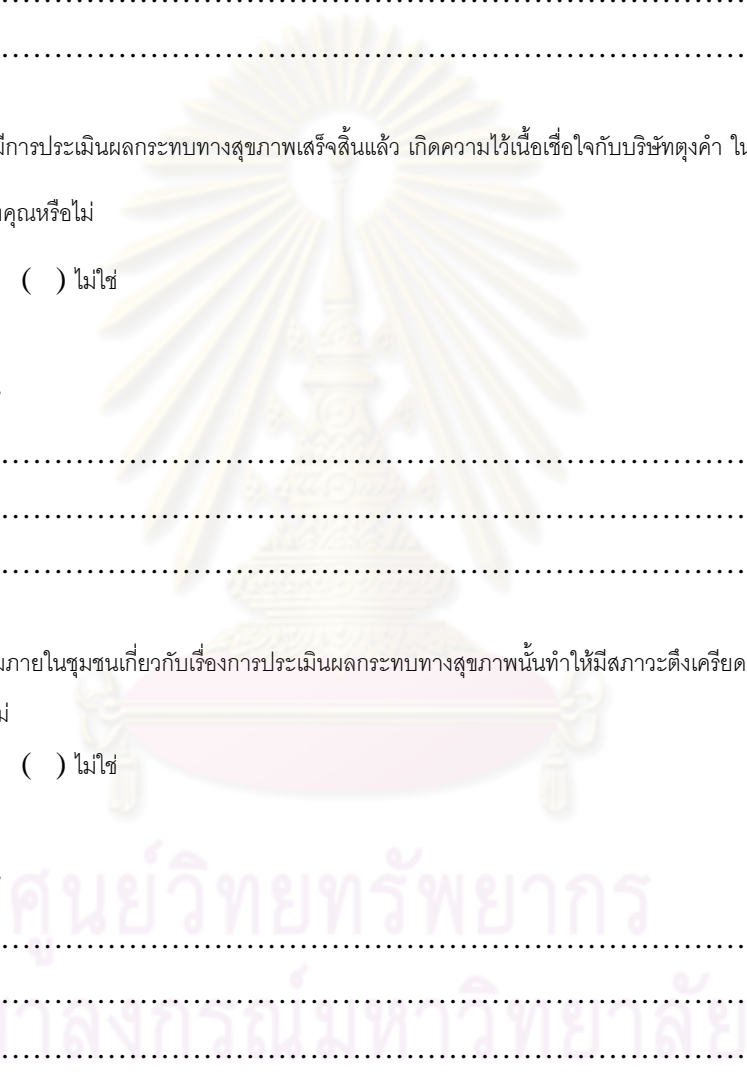รัฐบาลน้อยลงหรือไม่

( ) ใช่   ( ) ไม่ใช่

ทำไม จึงเป็นเช่นนั้น

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16. คุณคิดว่าการประชุมภายในชุมชนเกี่ยวกับเรื่องการประเมินผลกระทบทางสุขภาพนั้นทำให้มีสภาวะตึงเครียดระหว่างชุมชนและ

บริษัทตุงคำน้อยลงหรือไม่

ทำไม จึงเป็นเช่นนั้น

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APPENDIX C

QUESTIONNAIRE CHIA – ACADEMIC STAKEHOLDERS

1. Initiative
   a. Did the initiative to conduct a CHIA come from the community itself?
   b. Was the Rajabhat Loei involved from the beginning as well? In which ways?
2. Process
   a. Can you tell me about the process of the CHIA in Na Nong Bong?
   b. Were all community members involved in the process?
   c. What are according to you, the most important steps of the process?
   d. If the CHIA had to be done again, what changes to the process would you make?
3. Usefulness
   a. What do you think is the most important outcome of this CHIA?
   b. Who has shared in the results of the CHIA? Government? Tungkam?
   c. In which ways will it be used in the future?
4. Thai Constitution, Art 67.
   a. Why has Tungkam not performed a HIA yet, as it should according to the Constitution?
   b. What will be the next step in the process?
   c. Is the community ready to be in a *real* HIA process in the future?

Rajapat Loei University:

5. Involvement with CHIA
   a. In what ways is Rajapat Loei involved in the community and in the CHIA process?
   b. IN which specific ways will it support the community in the future?

Tungkam Ltd.

6. Has the company been involved in the HIA process yet?
7. Do you think this is the right strategy?
8. Do you expect any initiatives from their side in response to the CHIA? Which actions?

5 factors:

9. Has the **knowledge** of the community been improved thanks to the CHIA?
10. Has their **opinion** been taken into account yet? Has the CHIA made an impact?
11. Has the CHIA reduced **conflict** between the community and the company or government?
12. Has the CHIA improved relations between the community and the company or government? Is there more **trust** now between the different parties?

BIOGRAPHY

Steven previously studied at Maastricht University in The Netherlands where he obtained a master degree in International Economics in 2004. After working for several years in commercial companies, he moved to Bangkok in 2008. It was there that he realized that the world was more complex than business lets you believe. Consequently, he enrolled in the MAIDS program, a decision that changed his life profoundly.

In the next steps in life, Steven will try to combine his business knowledge with the ideas he gained throughout the MAIDS program. It is his ambition to help shape a world where sustainability is at the core of every business, and where local communities and organizations again form the heart of our society.