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
What type of unit	INDIVIDUAL	*Personal security*	*Human security*
	STATE	*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.

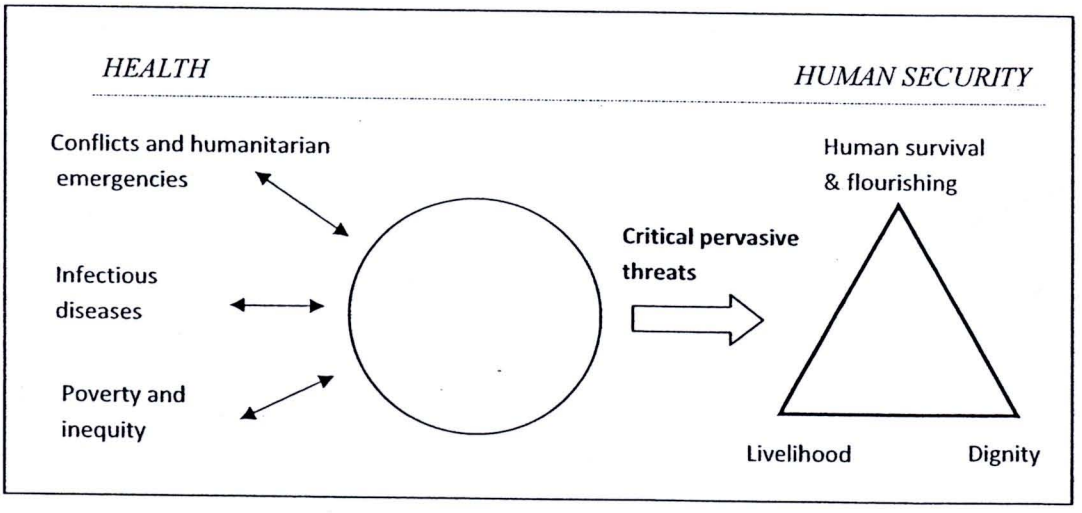
In Thailand, greater democracy and public participation in the last decade led to an increased influence of the human and social agenda (Acharya and Acharya, 2001). Human security was accepted as a meaningful concept, as the State realized that the security of its citizens could not be solely protected 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-

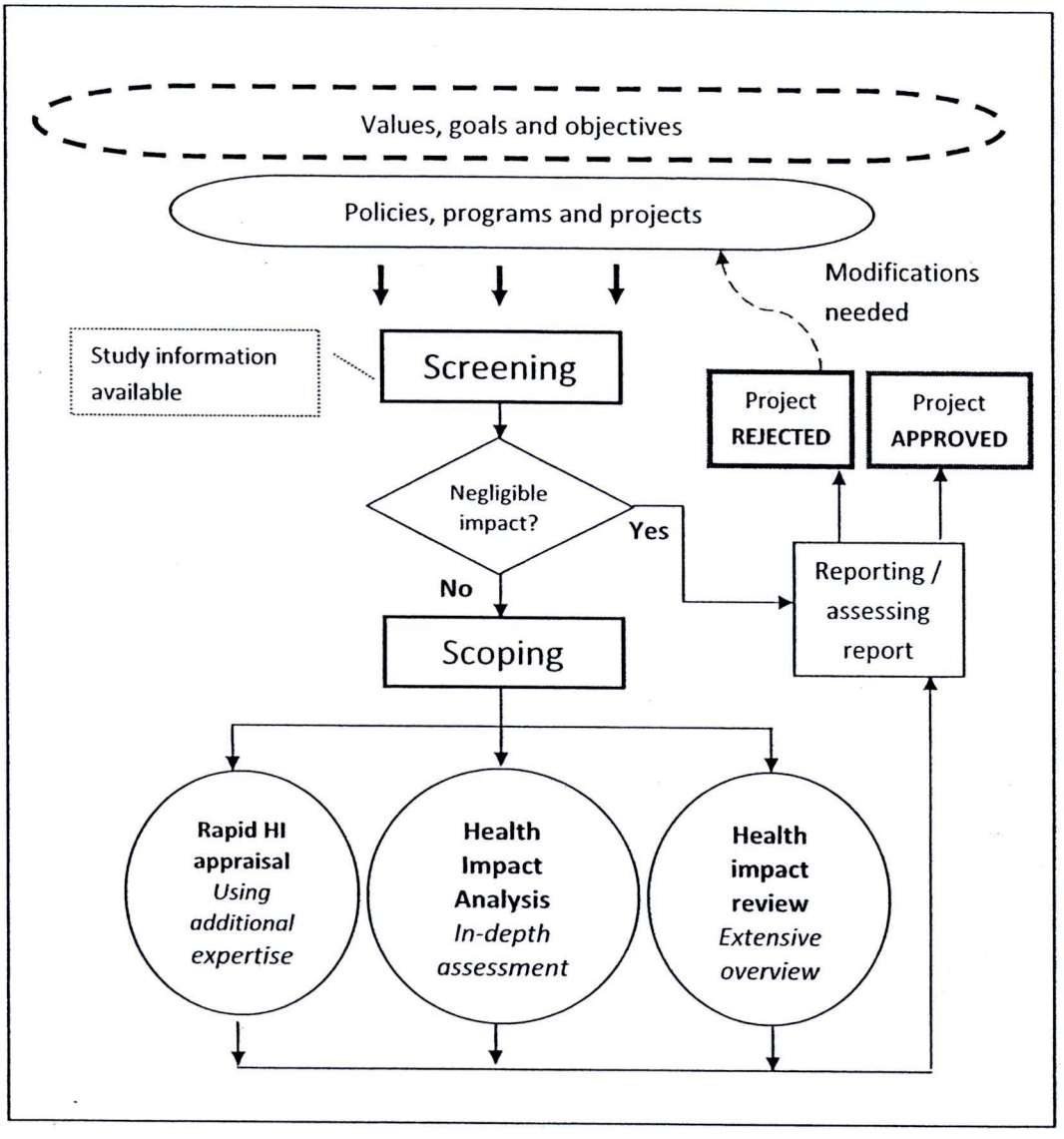
evolutionary approach are (1) the variety of its development practices, (2) the dynamics involved, (3) the interconnections between these different practices, and (4) the regulatory mechanisms within and among these different practices.

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.