## **Evolution or revolution for IA in the Thai context?**

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#### **Abstract**

This paper maps the history of the impact assessment (IA) system in Thailand. Aspects of effectiveness (i.e. procedural, substantive, transactive, and legitimacy) are used to reflect past IA practice in terms of strengths, limitations and challenges, in order to determine what kinds of changes are required to improve practice considering that both the people within the IA system and the IA system itself are the key elements in making IA work. The findings suggest that the existing IA system, the lessons learned, knowledge gained, and capacity built to date deserve to continue their evolutionary path rather than undergo revolution. However, people in the IA system influence practice and arbitrate legitimacy. Therefore, gaining legitimacy in the IA process might need some element of revolution!!

**Keywords**: Impact Assessment (IA), Environmental and Health Impact Assessment (EHIA), Strategic Environmental Assessment (SEA), Sustainability Assessment (SA), evolution, Thailand

### 1. Introduction

When addressing whether an impact assessment (IA) system should develop through revolution or evolution (based on the theme of the IAIA19 conference), it is worthwhile considering how these terms are understood. Banhalmi-Zakar et al. (2018) explained that "evolution involves iterative processes of practicing, reflecting and changing practices to adapt to new situations and conditions" (p. 5); and highlighted that "a revolutionary approach seeks to turn current thinking of IA 'on its head' through a complete overhaul of IA's processes as well as its aims" (p.6). Based on this explanation, we regard evolution as including expansion into different components (like social and health), and also the addition of regulatory detail to develop capacity. Revolution is, thus, something more radical defined as not already existing as common practice elsewhere. This suggests that deciding whether to pursue evolution or revolution should be carefully made and, in doing so, two simple elements are key: the IA system; and the people within the IA system. As such, this paper addresses the history of IA in the Thai context to map the evolution and/or revolution to date, thereby allowing a reflection of which has delivered an approach to IA that is effective, or whether further evolution and/or revolution is needed.

## 2. Methodology

The approach involved literature review, encompassing reviews of legislation, guidance documents, Government reports and past evaluations which have been published (for example, Baird and Frankel 2015, Wangwongwattana et al. 2015). In order to reflect on past practice, we examine the effectiveness of Thai IA practice based on recent conceptualisations of

effectiveness (e.g. Chanchitpricha and Bond 2018, Chanchitpricha et al. 2019, Pope et al. 2018), associated with a timeline of the evolution of Thai practice.

# 3. History of the impact assessment (IA) system in Thailand

The first experience of Environmental Impact Assessment (EIA) practice in Thailand was gained by the Electricity Generating Authority of Thailand (EGAT) in 1972, for the development of Srinagarind Dam project (Shepherd and Ortolano 1997, Swangjang 2018). It was a revolution in terms of its application to project development at the time. It was observed that the key elements on "mutually reinforcing support for EIA from both internal and external development agency, political entrepreneurship by agency staff that are concerned about the environment, and the transformation of power relationships within the agency by environmental professionals" were the key to the institutionalisation of EIA in EGAT (Shepherd and Ortolano 1997, p.354). IA practice has subsequently evolved since that initial revolution.

The evolution of the IA system in Thailand can be outlined based on four main aspects: mandatory requirement for EIAs; the development of other forms of IA to support public participation within EIA (i.e. social impact assessment (SIA) (ONEP 2006), and health impact assessment (HIA) (HIA Coordinating Unit 2009)); the development of SEA on a discretionary basis (Office of the Prime Minister 2018)); and the legal requirement for combined Environmental and Health Impact Assessment (EHIA) (see **Table 1**).

Table 1 Evolution of impact assessments in Thailand

IA as					SEA		
Discretionary					+		
basis					:		
IA as			SIA	HIA	:		
supporting PP			*	*	:		
in IA process				:	:		
Law	EIA		:	:	:	EHIA	SEA introduced on a
enforcement by	$\overline{\mathbf{V}}$		:	:	:	$\checkmark$	discretionary basis
NEQA			:	:	:	:	S <sub>M</sub>
	:		:	:	:	:	:
	:		:	:	:	:	
Milestones	1975	1992	1996	2000	2005	2010	2018

**Remarks:** +:IA as Discretionary basis; ★:IA as supporting PP in IA process; ☑:IA as Law enforcement by NEQA; ♥:highlighted in the Act but not clearly/ directly mandatory/direct enforcement not yet available in other relevant regulations

EIA was initially introduced in Thailand over 40 years ago when the National Environment Board (NEB) was authorised to provide justification and comments on project development which may cause adverse environmental impacts (according to the first enactment of the Enhancement and Conservation of National Quality Act (NEQA) B.E.2518); the statutory requirement for EIA was subsequently increased to 36 project-types in 2015 (Ministry of Natural Resources and Environment 2015). By 2007, the significance of health impacts associated with project development became clear and was raised in section 67 of the Thai constitution B.E.2550, and the National Health Act B.E.2550. This led to the requirement for environmental and health impact assessment (EHIA) to be conducted for 11 project-types (Ministry of Natural Resources and Environment 2010).

NEOA was revised in 1992 (B.E.2535) to improve the Act, which included assigning three key authorities to oversee the national environmental policy, planning, protection and management; as well as to promote public participation in resolving environmental problems (i.e. Office of Natural resources and Environmental Policy and planning (ONEP), Pollution Control Department (PCD), and Department of Environmental Quality Promotion (DEQP)). Later on, in connection with the changing political context within the country, the new Thai Constitution was enacted in B.E. 2560 based on the national referendum votes (Thai Constitution 2017). The NEQA was subsequently revised (to deliver NEQA (no. 2) B.E.2561 which came into force in 2018), whereby the whole EIA legislative content as appeared in the former version of the Act (chapter 4: environmental impact assessment) has been restructured and replaced by the updated and new content on, for example, fine and punishment measures, shorter time-frame of the IA process, introducing an open track for SEA to be taken into account (if the development may need to conduct SEA under any other regulations in the future) (ONEP 2018). However, at present no SEA regulation has been enforced (Prince of Songkla University 2018, Yusook 2018). Based on the NEQA (no.2), relevant ministerial notifications have been revised so that 35 project-types require approved EIA, and 12 projecttypes require approved EHIA. The Act also notes that public participation in the IA process has to follow the ONEP guideline as attached in the regulation (ONEP 2019). This is considered as IA evolution through expansion into different components, and also the addition of regulatory detail to develop capacity.

Thus, it is clear that IA legislation is a key driving force influencing IA implementation and evolution in the Thai context (Chanchitpricha 2012, Sandang and Poboon 2018).

## 4. Strengths, limitations and challenges to IA practice in the Thai context

According to the literature on the performance and/or effectiveness of the IA system in Thailand (Chanchitpricha and Bond 2018, Chanchitpricha et al. 2019, Sandang and Poboon 2018, Wangwongwattana et al. 2015), it was found that procedural aspects of IA grab a great deal of attention from a broad range of relevant stakeholders (i.e. government authorities, project proponents, IA practitioners, EIA expert review panels, villagers, non-governmental organisations) compared to other aspects of effectiveness e.g. substantive, transactive, and legitimacy. Shortcomings arising are summarised by Banhalmi-Zakar et al. (2018) in terms of IA components (e.g. inadequate scoping, public participation, cumulative impacts & transboundary issues, poor alternative considerations, doubts on prediction accuracy, local impacts, trade-off benefits, and limited mitigation practices). For other essential problems, the findings are related to substantive and transactive effectiveness, as well as legitimacy; e.g. lack of mandatory SEA. Strengths and limitations, reflecting from the aspects of IA effectiveness are highlighted in **Table 2**.

Table 2 Strengths/ limitations of IA practice in Thailand reflected from effectiveness aspects

Effectiveness	Strengths	Limitations and challenges		
Procedural	©Addressing SD in national	⊗Limited legal regulations for SEA		
	Policy&Planning	⊗Limited collaborations		
	©Long-term experiences in IA	⊗Limited integration/ connections of ecosystem		
	practice provides lessons	service issues and EIA system		
	©Availability of legislation on	⊗Limited creative/ effective approaches for public		
	EIA/EHIA implementation	participation		
		⊗Ineffective <b>communication</b> of relevant guideline/		
		regulations/ information		
Substantive	©Addressing SD in national	⊗Limited legal regulations for implementing SEA in		
	Policy&Planning	decision making		
		⊗Informed decision making for SEA not well		
	on implementing EIA&EHIA in	communicated		
	decision making	<b>⊗Early start issue</b>		
	©Involved stakeholders have	⊗The <b>legal mandate</b> has been recently enforced, this		
	learned from IA process, which	could take some time to build clear understanding and		
	could lead to desirable outcomes	acceptance among relevant stakeholders		
	e.g. better decision-making for			
	project development			
Transactive	©The practice associated with	⊗Limited human resources available in IA- related		
	timeframe for IAs suggested by	practices e.g. experts in EIA/ EHIA, SEA		
	Terms of Reference (TORs)	②Limited financial support for IA research		
	©Allocations of roles in IA	<b>⊗Adaptive capacity to changes</b> among IA-related		
	practice in relation to their fields	staff		
	of expertise			
Legitimacy	©Increasing perception of IA	⊕Lack of trust in EIA findings as conducted by		
	implementation & knowledge	licensed consultants as they are paid by project		
		developers		
		<b>⊗</b> Costs of IAs are typically not disclosed		
		<b>⊗Feedback/ comments by EIA review expert panel</b>		
		have <b>not yet been widely disclosed</b> to relevant actors.		
		⊗Concerns/ conflicts on limiting rights of the people		
		related to IA practice for some project development		
		can be arisen, according to the enforcement of the		
		latest version of EIA regulations as revised in NEQA		
		no.2 (B.E.)		
		<b>⊗Ineffective communication</b> may lead to challenges		
		in communicating related knowledge/ correct		
		understandings		

Sources: Created based on (Chanchitpricha and Bond 2018, Chanchitpricha et al. 2019, Sandang and Poboon 2018, Swangjang 2018, Wangwongwattana et al. 2015)

## 5. What's next for IA practice?

Rapid global change (global megatrends) is a significant issue to take into account when considering how environmental practice (EA) should develop in the future (Retief et al. 2016). Thailand has demonstrated a clear determination that sustainable development, and dealing with the consequences of global change, e.g. climate change, should be integrated with the national strategic policy and plans (ONEP 2015). It is clear that IA practices have been embedded as a tool for decision-making towards sustainability in the Thai context. The limitations and challenges highlighted in **Table 2**, imply that both the people within the IA system and the IA system itself are the key elements in making IA practice serve society either

for better or for worse. It can be emphasised that lessons learned and experience gained throughout the evolution of IA has improved effectiveness. This is supported by the findings from assessing IA effectiveness in Thailand to date. In order to ensure that IA has improved after each evolutionary step, it is crucial that assessing the effectiveness of IA practice should be taken into account in the Thailand's IA system. As such, the existing IA system, knowledge gained and capacity built to date should continue to evolve rather than undergo revolution. However, people in the IA system of a particular context influence practice. As such, gaining legitimacy in the IA process might need some element of revolution!

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