

# **Power and environmental conflict: A case study of the Mae Moh power plant in Thailand**

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by

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## **Abstract**

Managing environmental conflict is becoming increasingly important. This research explores management's responses—mediated by the Thai government—to environmental conflict with the local community. The central research question of this thesis is 'How did the Electrical Generating Authority of Thailand (EGAT) respond to local resistance arising from the environmental impact of the Mae Moh coal-fired electricity generating power station and how did this response demonstrate the unequal power relations of the key players in the dispute?'

This case study monitors the environmental dispute, with the research focusing on documenting the conflict between government, EGAT and the communities during the course of this dispute. Utilising the insights from *political ecology theory* this thesis looks at the *unequal power relations* that shape the dynamics of the conflict and outcomes of this dispute and how this has impacted on management's responses in EGAT. The study has broader implications for understanding contemporary managerial responses to environmental conflict, not only for Thailand.

After the Mae Moh power plant started its operations, local villagers were affected by the emissions released from the power plant, causing the conflict between EGAT and the local residents. The communities had to resort to court action in an attempt to achieve resolution. This dispute involves more than the two main players and is influenced by political forces and traditions in Thailand as well as structures of government and the law.

In order to explore the uneven power relations that shape the contours of and outcomes of an environmental dispute the research design chosen is a single case study of the state enterprise at Mae Moh. It adopts mainly qualitative research instruments based on individual interviews to generate primary data about the conflict and the different perceptions of the major players and the outcomes that were imposed. It also draws on secondary data to provide more independent insights into the dispute.

Two trips have been made to Thailand to conduct fieldwork for this study, when data was collected from both primary and secondary sources. The expected outcome of the research is to make a significant contribution to the literature on management and environmental conflict issues, specifically in the social context of a less-developed country in Asia. While the area of state enterprise-NGO conflict resolution has been explored thoroughly in Western literature, there has been little research in less developed countries such as Thailand.

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## **Statement of originality**

The work contained in this thesis has not been previously submitted to meet requirements for a degree. The thesis does not include previously published components or written by another author except where due reference is made.

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## **Abbreviations and special terms**

ADB	Asian Development Bank
APP	Air Pressure Pulse
CCOP	Coordinating Committee for Geoscience Programmes in East and South-East Asia
CDM	Clean Development Mechanism
CEM	Continuous Emission Monitoring
CSR	Corporate Social Responsibility
CSO	Civil Society Organisation
CMA	Conflict Management Alternatives
ECR	Environmental Conflict Resolution
EGAT	Electrical Generating Authority of Thailand
EIA	Environmental Impact Assessment
EPA	United States Environmental Protection Agency
ERC	Energy Regulatory Commission
FEMA	Federal Emergency Management Agency
FGD	Flue Gas Desulphurisation
FT	The Automatic Tariff Adjustment
GDP	Gross Domestic Product
GIN	Greening of Industry Network
GONGO	Governmental Organised Non-Governmental Organisation
GRP	Gas Release Pulse
HREC	Human Research Ethics Committee
IGO	Intergovernmental Organisation
INGO	International Non-Governmental Organisation
ISO	International Organisation for Standardisation
Jit-as a	EGAT's voluntary unit
Lao PDR	Lao People's Democratic Republic
LED	Light Emitting Diode
NDIR	Non-Dispersive Infra-Red

NGO	Non-Governmental Organisations
Ngan	A measurement of land size
OECD	Organisation for Economic Cooperation and Development
ONESDB	Office of the National Economic and Social Development Board
OTOP	One Tambon One Product
PAD	People's Alliance for Democracy
PCD	Pollution Control Department
PDA	Population and Community Development Association
Rai	A measurement of land size
RPP	Rock Pressure Pulse
SCG	Siam Cement Group
SEC	Thai Security and Exchange Commission
SET	Stock Exchange of Thailand
SIA	Social Impact Assessment
SPA	Strategic Perspectives Analysis
SRP	Stemming Release Pulse
Tambon	Subdistrict organisation
TBL	Triple Bottom Line
UDD	United Front for Democracy
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	United States Environmental Protection Agency