

# CONTESTED WATERSCAPES

in the  
Mekong Region

HYDROPOWER, LIVELIHOODS AND GOVERNANCE



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# Contested Waterscapes in the Mekong Region

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Hydropower, Livelihoods and Governance

EDITED BY

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# Pak Mun Dam: Perpetually Contested?

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*Tira Foran and Kanokwan Manorom*

## INTRODUCTION

Ever since its approval in 1989, Pak Mun Dam has sparked controversy, linked to resistance networks that have sought to defend, mitigate and restore fisheries-dependent livelihoods. This chapter provides a history of the Pak Mun Project and summarizes its main features – ecological, engineering and governance. It explores the project's trajectory in the context of wider changes in Thai state–society relations. We review important debates between proponents and opponents, and unresolved controversies and risks. Finally, we reflect on the consequences of the dispute over Pak Mun Dam and discuss critical lessons from the case.

The first publicized dispute in Thailand about a large dam was over the Nam Choan Project (on the Upper Kwae Noi River), proposed in 1982 by the state-owned Electricity Generating Authority of Thailand (EGAT). Nam Choan Dam would have flooded 223km<sup>2</sup> of a wildlife sanctuary in Kanchanaburi Province northwest of Bangkok. The same year, a coalition of Bangkok environmentalists, students, local middle-class people, non-governmental organizations (NGOs) and some of the up to 2000 Karen minority people who would be displaced joined in protest against the project. Opponents argued that the project imposed unacceptable social costs, would deplete forests and harm wildlife. Twice during the 1980s, the government of Prime Minister Prem Tinsulanonda reviewed and shelved the Nam Choan Project. This signalled new complications for the dam-building programme of EGAT and the Royal Irrigation Department (RID), the main builders of large dams in Thailand. Partly as a product of the Nam Choan Dam campaign, Project for Ecological Recovery, a new NGO, emerged in 1986 to

defend forests and resource-dependent livelihoods. Some observers have interpreted the state's determination to proceed with Pak Mun Dam in 1989 as a reaction to EGAT's earlier setback at Nam Choan.

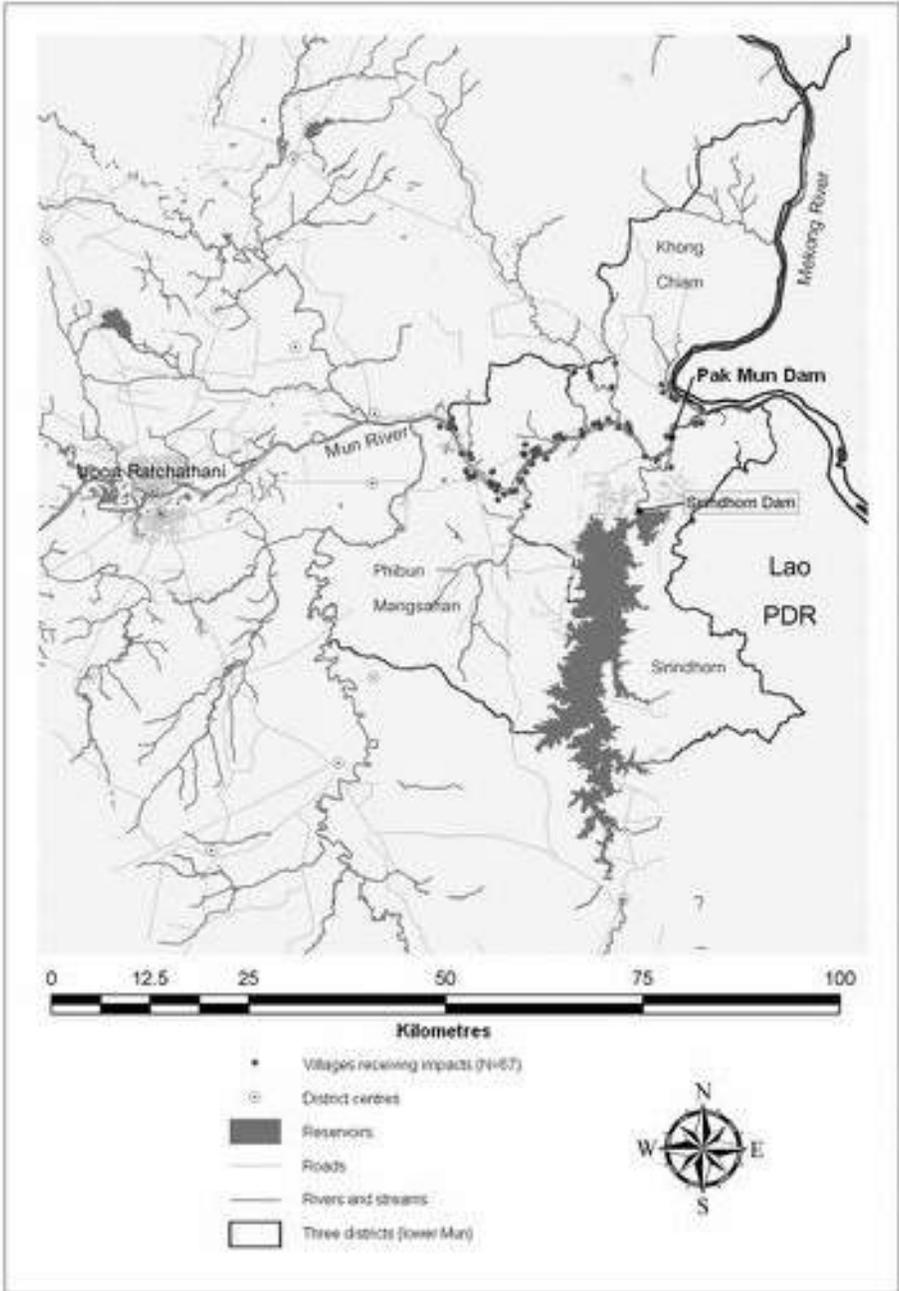
Pak Mun Dam is located approximately 80km downstream from the provincial centre of Ubon Ratchathani and 5.5km upstream of the confluence of the Mun and the Mekong rivers (see Figure 3.1). Constructed during 1990 to 1994, the dam is 17m high, 300m wide, with eight radial gates that can be fully opened to release water.

The Mun's living aquatic resources are noted for their high biodiversity and contribution to subsistence and trade (Roberts, 1993; Sretthachau, 2002). When the gates of Pak Mun were opened between 2001 and 2002 for a year-long experiment, two studies counted more than 150 species of fish (Sretthachau, 2002; UBU, 2002). Fishermen use a variety of gear, including hook and line, traps, nets and beach-haul seines. Total catch has not been estimated for a number of reasons, including the large number of landing sites, subsistence consumption and – most importantly for sustaining important fish populations – lack of a long-term fisheries assessment programme. A concrete fish ladder was installed in 1996, but its design does not allow significant upstream migration (Roberts, 2001). Instead, in a 2003 decision that we explore below, EGAT was requested to fully open the dam's gates during the annual wet season, nominally for four months beginning in June.

Because it is a 'run-of-river' dam operated for power generation, Pak Mun cannot also be used to store significant amounts of water. Yet, since the early 2000s – partly as a result of populist development policy – the state has expanded small pumped irrigation systems near and upstream from the dam. Critics view this initiative as a justification for not opening the dam gates beyond four months (Foran, 2006, Chapter 8), reserving the dam instead for power generation at least eight months per year, including during Thailand's peak power demand hot season.

Our Pak Mun Dam 'case' (see Table 3.1 for chronology) consists of a complex series of interactions between local people (including anti-dam campaigners), civil society organizations and state agents during the period of 1989 to 2008. Resistance against Pak Mun began in 1989 to 1990 with informal networking among villagers who opposed the dam and the state's process. The state worked through local authorities such as district and sub-district officers and village headmen.<sup>1</sup> Prior to construction, they tried to elicit public support at meetings which they summoned. The state's paternalistic process and threats of repression failed to intimidate a few articulate and confident middle-aged women. They helped to form a larger network and sought advice from a small civil liberties NGO in Ubon Ratchathani (Missingham, 2003). Opposition spread to town people: first to vendors opposed to the flooding of Kaeng Saphue, a large rapids and tourist attraction. Later it spread to a segment of the middle class in Ubon Ratchathani.

In the earliest stages, people seemed to be responding to a lack of information and fear of widespread impacts. When it became understood that the run-of-river



**Figure 3.1** *Lower Mun Basin and Pak Mun Dam*

Source: village data from EGAT (undated)

design chosen by EGAT would lead to a much smaller area inundated, and when EGAT undertook not to flood Kaeng Saphue, most of the opposition dissipated. The protest campaign narrowed to a core of villagers and alternative development NGOs. Local people were apparently the first to raise the concern that the Pak Mun Dam would destroy wild fisheries harvests after they witnessed blasting of the river bed during construction in 1991. By 1994, a villagers' organization representing some 2500 families from more than 50 villages had formed to press for compensation in terms of land and fisheries. A pro-dam network led by village headmen and other local authorities also emerged, promising equal compensation to people without the need to protest. In 2008, Pak Mun's 15th year of operations, pro- and anti-dam coalitions still existed.

Regardless of their level of engagement in dam disputes, villagers in the Lower Mun River Basin pursue similar livelihood strategies. They are smallholder farmers who grow one main crop of rice during the May to October monsoon season. Holdings are typically 5ha to 7ha; but soils near the dam are often poor. By Thai standards, many households are income poor. Almost all households supplement their income by off-farm labour, with significant rates of seasonal and long-term out-migration, especially among younger people (UBU, 2002).

The degree to which local people derive benefit from living aquatic resources, especially wild fisheries, has been a topic of multiple rounds of dispute. Although marginalized in state-sponsored livelihood surveys, and difficult to quantify because diffuse, variable and politicized, living aquatic resources make meaningful contributions to livelihoods (Sretthachau, 2002; UBU, 2002; Foran, 2006, Chapter 8). This is especially true for land-poor farmers.

## **PRE-OPERATIONAL PATTERNS OF CONTENTION, 1989 TO 1994**

By the 1980s in Thailand, the public sphere vital to engage state decision-making had distinctly increased as a result of contentious democratization during the 1970s (Foran, 2006, Chapter 4). Yet, advocates calling for more deliberation over Pak Mun Dam in the early 1990s met with predominantly aloof responses from state agents (Foran, 2006, p193). As in many other conflicts over rural development at the time, Thai NGOs stepped in to help villagers publicize their grievances.

NGOs sensed that EGAT's application for World Bank financing generated opportunities to amplify their concerns internationally and to mobilize transnational opposition (Hubbel, 1992).<sup>2</sup> They cast the problem in terms developed since the late 1960s. A 'community culture' school of thought portrayed the village economy as inherently superior to dependent capitalist development (Phongpaichit and Baker, 1995, p387). It defended local peoples' common natural resources, such as wild-capture fisheries and tourist attractions against resource-grabbing by state agencies and private interests.

**Table 3.1** *Pak Mun Dam case: Key events (1982 to 2007)*

<b>Year</b>	<b>Actions</b>
<i>Events under Prime Minister Prem Tinsulanonda (March 1980–April 1988)</i>	
1982	Environmental impact assessment (EIA) for a dam located above confluence of Mun and Mekong rivers at 112m above mean sea level (amsl) crest indicates 4000 households would need resettlement.
1983–1987	1983: Kaeng Tana National Park declared; the Electricity Generating Authority of Thailand (EGAT) conducts new feasibility study for dam located upstream. 1985: EGAT lowers water retention level to 108m amsl, relocates site to lower inundation impact. 1987: Pak Mun Dam appears in EGAT's <i>Power Development Plan</i> .
<i>Events under Prime Minister Chatichai Choonhavan (April 1988–February 1991)</i>	
1989	April: Pak Mun Project first approved by cabinet; first protest at Ubon Ratchathani provincial hall.
1990	EGAT applies for World Bank loan to develop power system, including Pak Mun. February: campaigns begin to increase transparency about the number of affected households; three-day anti-dam rally/confrontation with supporters' rally. May: cabinet approves Pak Mun budget of 3.88 billion baht (US\$155.2 million); sets up committees for compensation and resettlement; 262 households understood affected. May: northeast NGOs support anti-dam villagers. June: site preparation work commences. August: government releases environmental mitigation plan. October: World Bank completes pre-investment staff appraisal report.
1991	January: completion of preliminary site works.
<i>Events under Prime Minister Anand Panyarachun (national peacekeeping council junta) (February 1991–April 1992)</i>	
1991	February: military coup led by General Suchinda Kraprayoon ousts Chatichai government, appoints Anand as prime minister; EGAT sticks to its estimate of 262 affected households; proceeds with construction. March: 12,000 petition World Bank against making loan. May: two-week rally ends with agreement to establish participatory impact assessment committee. June: Anand government appoints multi-stakeholder problem-solving committee. October: World Bank directors meet with Pak Mun opponents. December: World Bank approves loan, with two objections and one abstention.
1992	March: EGAT, Royal Forest Department, National Parks Department and Fine Arts Department defend rapids blasting in Kaeng Tana National Park as legal and not harmful. April: 200 villagers protest against rapids blasting, claiming damage to fisheries migration. April–May: Bangkok demonstrations against Suchinda assuming prime ministership; Suchinda resigns after large-scale demonstrations turn violent; Anand reappointed as prime minister. September: Chuan Leekpai (Democrats) win elections.

**Table 3.1** (continued)

<b>Year</b>	<b>Actions</b>
<i>Events under Prime Minister Chuan Leekpai's first administration (September 1992–July 1995)</i>	
1993	February: oppositional villagers begin new campaign for just compensation.
1994	June: dam commissioned, impoundment begins, fish pass completed. April–June: rallies against dam in Bangkok. October: 2000 villagers rally for fair fishing livelihood compensation at Ubon Provincial Hall; after two weeks, march to dam site. December: 300 villagers affected by Sirindhorn Dam march to join Pak Mun rally, demanding compensation for the earlier project.
1995	January: government approves new consensus-based participatory fisheries compensation committee, chaired by Plodprasop Suraswadi. March: government agrees to pay for three years' lost fishing income; 157-day rally ends. May–November: Plodprasop committee approves 2932 out of 4530 applications for fisheries compensation. June: first round of compensation to 571 households; agricultural co-operative formed to hold two-thirds of payment in trust. May: Chuan dissolves parliament amidst corruption scandal; Chart Thai Party wins elections.
<i>Events under Prime Minister Banharn Silpa-Archa (July 1995–November 1996)</i>	
1995	December: Assembly of the Poor (AOP) announces <i>Mun River Declaration</i> ; 600 demonstrators present this sustainable development manifesto to ASEAN leader in Bangkok.
1996	March: AOP stages multi-issue farmers' rally with up to 12,000 people. April: participatory problem-solving committee set up with Prime Minister Banharn as chair. Sirindhorn Dam villagers' movement for retroactive compensation grows to 2500 households. September: Banharn's coalition government collapses; Chavalit's New Aspiration Party wins subsequent elections.
<i>Events under Prime Minister Chavalit Yongchaiyudh (November 1996–November 1997)</i>	
1997	January: AOP begins 1999-day multi-issue rally. April: government agrees to pay perpetual fisheries compensation for 3080 Pak Mun fishermen. July–November: financial crisis erupts; Chavalit devalues baht and resigns in November; Chuan assumes prime ministership.
<i>Events under Prime Minister Chuan Leekpai (second administration November 1997–February 2001)</i>	
1998	April: Chuan cabinet refuses to honour Chavalit government resolution of 29 April 1997. July: Thaksin Shinawatra launches Thai Rak Thai Party.
1999	March: campaign against Pak Mun demands dam decommissioning, builds protest village adjacent to dam. Late 1999: World Commission on Dams (WCD) multi-stakeholder process begins.

**Table 3.1** (*continued*)

<b>Year</b>	<b>Actions</b>
2000	March: WCD draft report criticizes performance of dam and fish pass. May: AOP villagers blockade Pak Mun and Rasi Salai dams. June: government establishes 'neutral' problem-solving committee, chaired by Bantorn Orndam. July: Bantorn committee proposes four-month trial opening; local university to study social, economic and ecological impacts; Chuan government declines; AOP villagers scale walls of Government House, resulting in mass arrests.
<i>Events under Prime Minister Thaksin Shinawatra (February 2001–September 2006)</i>	
2001	April: government accepts trial opening; commissions Ubon Ratchathani University (UBU) study.
2002	June: after Pak Mun open for 12 months, EGAT Governor Chalermchai Ratanarak offers four months per year seasonal opening policy. September: problem-solving committee chaired by Deputy Prime Minister Pongpol Adireksan votes for four-month seasonal opening. October: cabinet resolution ratifies Pongpol committee decision. Late 2002: UBU Pak Mun study publishes interim and final conclusions; Tai Baan research completed. December: Thaksin chairs roundtable with academics and anti-dam villagers; National Statistics Office (NSO) surveys the opinions of 3750 household heads in 150 villages.
2003	January: government reconfirms final decision of four-month seasonal opening; Bangkok governor evicts 500 demonstrators. March: Ministry of Agriculture announces Pak Mun Irrigation Project and fish-stocking investments.
2003–2006	Four-month seasonal opening policy implemented.
<i>Events under Prime Minister Surayud Chulanont (National Security Council junta) (September 2006–February 2008)</i>	
2007	February–May: local authorities organize villager survey (n = 20,592); claim overwhelming support for a year-round dam closure policy; results unpublished. March: 3000 villagers hold a pro-dam rally. June–July: government abandons, then readopts, the four-month opening policy; devolves operational management to multi-stakeholder provincial committee.

*Source:* adapted from Foran (2006)

NGOs also presented an injustice narrative: the state trampled over basic rights such as the provision of transparent information and wider participation in project planning. Opponents complained about the state's closed practices, its lack of reliable information and its occasionally arrogant handling of public meetings. They decried plans to resettle inundated farmers on land often of marginal value and with less secure titles.

How did villagers' opposition emerge and sustain itself? Missingham (2003) credits the strength and efficacy of an NGO-led internally democratic social change

network. However, the movement's internal structure was not the only cause of sustained mobilization. Events during 1989 to 1994 suggest that one important reason people kept on challenging the state's handling of Pak Mun was that state agents persistently responded with a *mixture* of concession and repression. Process concessions made during Anand Panyarachun's government needed to be fought for again during the subsequent Chuan Leekpai administration. Chuan's government first granted these concessions in the form of a multi-stakeholder committee to review the scope and eligibility of compensation. Later it revoked the multi-stakeholder process when senior decision-makers perceived it as too threatening to established practices. This tantalizing and frustrating dance of concession and denial spurred opponents to keep struggling. Defining and identifying affected households was a point of contention.

### State response to dam opponents

The collective action that emerged was perceived as very threatening to established notions of political order. Many immediate responses by state agents were repressive.<sup>3</sup> The police described people who distributed leaflets, wrote letters and attended demonstrations as a 'minority', as 'paid' agents or even as 'communists' (*Bangkok Post*, 1991). A second dimension of repression was state-owned radio and television coverage that failed to report on anti-dam activism, and consistently reported favourably on public meetings in Ubon Ratchathani. Provincial media also gave the project favourable coverage (Arthit, interview 2 July 2002). A third dimension of repression involved mobilizing local support. EGAT and the state instructed local leaders to speak out in favour of the dam and to strongly discourage villagers from voicing dissent (Missingham, 2003, pp73–76).

### Impacts and consequences of protest

Until 1993, the civil society opposition campaign had limited impact. The government of Prime Minister Chatichai Choonhavan moved forward with approval and construction during 1989 to 1991. The military-appointed government of Prime Minister Anand Panyarachun did not halt construction during 1991 to 1992 when the dam was less than 10 per cent complete. Some World Bank directors voted against the project in late 1991, but not a majority.

Opponents, nonetheless, opened up spaces for debate, and notable concessions were made. Early discursive concessions underpinned subsequent campaigns. Under public pressure, the governments of Prime Minister Anand and, later, the first administration of Chuan Leekpai set up committees to review flooding and livelihoods compensation. A 1991 committee under the Anand government validated protesters' claims that EGAT was *not* handling Pak Mun as transparently as they and the government desired. It also helped to legitimate the idea of problem-

solving committees with ordinary villager participation. Campaigns in 1993 to expand recognition of affected households built directly on promises made in Anand's committee in 1991. By December 1993, the state had accepted demands for a process devolved down to a set of village-level committees, with villager participation, to help process residents' grievances (Foran, 2006, p191).

A devolved process helped to deliver compensation but was not sufficient to hold the state accountable for all types of impact. The state and protesters were particularly in dispute over land higher than 108m above mean sea level (the nominal maximum water level). EGAT initially claimed that it would pay only for earthworks to raise affected structures. Opponents claimed their homes would be surrounded by water. After more demonstrations at the construction site, they prevailed in getting the state to pay the costs of moving and re-erecting houses (see Table 3.2; Foran, 2006, p192).

**Table 3.2** *Categories of households recognized for compensation of structures and fixed assets*

Set (1): Recognized in 1982–1983 studies by Team Consulting Engineers Ltd	Number
1.1 Affected by construction, Ban Hua Haew village	11
1.2 Living below 108m amsl	136
1.3 Living 108m–108.5m amsl	96
Sub-total	243
Set (2): Recognized in 1994 by civil society campaigns, 1990–1994	
2.1 Affected by river bed blasting	227
2.2 Agriculture land inundated	706
2.3 Living above 108.5m amsl, chose to relocate	473
Sub-total	1406
Total	1649

*Notes:* Non-fisheries impacts only. 'Recognized' refers to recognition of categories; numerical estimates vary. Original set (1) estimates ranged from 241 to 379, but at least 1821 households eventually received compensation (Missingham, 2003, p72).

*Source:* Amornsakchai et al (2000, p58)

Dam opponents did not succeed in defeating some powerful pragmatic arguments, such as the argument that the dam had already been approved, construction had started and, therefore, the dam must proceed. In light of this discursive and institutional context, the fact that activists successfully forced the state to recognize broader categories of people and impacts was a very important outcome. It delivered collective benefits to those otherwise invisible to the state.

Protest also produced important unanticipated consequences. The mobilization of pro-dam villagers frequently led to violent encounters. Displacing protesters from a given site could trigger sympathetic media coverage. Protesters' non-violent forms of contention, when met with violence, tended to generate social movement and

media frames of innocent and displaced victims, which governments subsequently had trouble dismissing.

A second outcome unanticipated by activists was that local communities divided. As Chanchai, a pro-dam local leader, remembers it, generous compensation divided local people between people whose land or structures would be inundated and those not:

*Land around here was cheap before the compensation process because it wasn't great paddy land. It was worth only about 500 baht per rai [US\$125 per hectare]; it would flood almost every year. The state announced it would compensate at US\$8750 per hectare, up to 1.6ha, and would provide another 1.6ha of land. It would compensate trees on flooded land and structures. This led to envy. People were divided into two factions: those getting impacts, and those not. Everyone wanted to receive flooding impacts. The protesters joined [anti-dam rallies] out of envy. 'Nam ko tong thuam khoi bang' ['The water has to flood me as well']. (Kamnan [Sub-District Officer] Chanchai, interviews 2 June 2002 and 12 November 2005)*

During subsequent years, these divisions and pressures for a wider distribution of compensation benefits proved to be a great challenge both to authorities and activists.

To sum up the pre-operational period, campaigns against Pak Mun produced potent discourses of transparency and accountability. Occasionally, sympathetic and open-minded policy-makers exercised agency, but were constrained by institutions and associated discursive practices. Opponents did not change these powerful practices and institutions, but won some important concessions, such as recognition of a broader range of affected people (see Table 3.2). Doing so required strong and sustained collective action, as well as the ability to broaden problem definitions and solutions. The state's responses to the strategic actions of its opponents ranged from repression, to opening negotiation, leading to concessions. Outcomes hinged on decision-makers' reactions to the *emergent* process of sustained collective action. Two plausible processes are involved in those outcomes:

- 1 deliberative processes that changed problem definitions and solutions; and
- 2 conciliatory openings offered by elites, after peak protest events or unexpected episodes of violence.

## **POST-OPERATIONAL PATTERNS OF CONTENTION, 1994 TO 2003**

After completion of the dam in 1994, a new round of collective action emerged around a discourse to hold the state explicitly accountable for impacts upon

fisheries. Fisheries impacts had been argued about since 1991, but were only beginning to be processed by a provincial-level sub-committee two years later. In late 1993, Maliwan and Pho Siang, two protest leaders, emerged from jail to demand that the state pay fisheries compensation of 35,000 baht (\$US1400) per household for each year of the three-year constructions (Buchita, 1997; Foran, 2006, p197).<sup>4</sup>

After Pak Mun's commissioning in June 1994, the state's response to dam opponents continued to range from repression to negotiated concessions. As during the prior period, violence against the protesters (e.g. police crackdowns on direct actions) provoked a temporarily empowering media backlash. Despite these similarities, the post-operation period is qualitatively different. The main movement organizations opposed to Pak Mun – the Mun River Villagers' Committee and, later, the Assembly of the Poor (AOP) – began to stage larger demonstrations. This was, in part, because the new campaign for fisheries compensation appealed to a larger set of villager beneficiaries, and also because of proven successes in earlier campaigns and the entry of new aggrieved groups into the AOP.<sup>5</sup>

Faced with the challenge of sustained mobilization, the state, beginning during the first Chuan Leekpai administration, deliberately stalled and otherwise refused to budge on protesters' demands. The Prime Minister's Office devolved conflict management responsibilities to provincial government, but did not, despite claims to the contrary, devolve authority adequate to resolve those conflicts (Foran, 2006, Chapter 7).

Opposition to Pak Mun triggered defensive action. In 1994, the year Pak Mun was commissioned, *Kamnan* Chanchai (the leader quoted above) formed a new group to oppose the protesters. He did so, he said, out of loyalty to the '80 per cent' of villagers who still respected their leaders, and found the protesters' behaviour outrageous. Chanchai remembers the protesters as aggressive, wilful and immoral: 'If they felt like blocking a road to demonstrate, or a district office, they just did it.' He found that his peers in three local districts felt the same way: villagers increasingly viewed them as having lost their power. District officers and the provincial governor supported his effort, as did senior EGAT management. 'They gave me a green light', said Chanchai (interview, 12 November 2005).

Thus emerged the Kamnan and Village Headmen's Group (KVHG). Lacking a broad change agenda, its primary objective was to dissuade villagers from joining anti-dam action. KVHG did this by making claims on behalf of villagers who stayed out of protests. It administered interim fisheries compensation claims for more than 2000 villagers, without their having to join any of the anti-dam campaigns. It reasoned that whatever claims anti-dam protesters established would eventually be granted, on equity principles, to other fishing households. But some members of the KVHG also organized counter-demonstrations against the anti-dam villagers.

Meanwhile, faced with protests, the central government learned to withhold force. It let protesters languish and, especially post-1997, espoused their right

to protest. Such a response helped to produce marathon demonstrations for livelihoods restoration: in 1994 to 1995 (157 days); 1997 (99 days); and a 'protest village' adjacent to the dam during 1999 to 2002. A counter-response by the protesters was to stage actions in ways calculated to maximize the odds of favourable media coverage. Outcomes were mixed: the 157-day sit-in (during the first Chuan government) and the 99-day rally in Bangkok (during the government of Prime Minister Chavalit Yongchaiyudh) led to negotiations resulting in unprecedented agreements to compensate for damage to fishery-dependent livelihoods (see Table 3.2). By contrast, the protest village sit-in campaign during the second Chuan government yielded 15 months of impasse.

### **Reinvigorated protest campaign and World Commission on Dams Assessment, 1999 to 2000**

During 1999 to 2000, as the protest village campaign wore on, the Pak Mun conflict was transformed. This was partly as a result of an expert assessment made on behalf of the World Commission on Dams, and partly as a result of the second Chuan Leekpai government's hardened stance towards protesters. After the Thai financial crisis and regime change in late 1997, Chuan's incoming government decided to withdraw the concessions made by the previous Chavalit government for lost fisheries income. In April 1998, after several weeks of another large dry season rally, Chuan's cabinet resolved to not pay any compensation for past development projects, arguing that this would open a never-ending series of claims and that the government was broke. Essentially, it refused to honour any of the commitments to the AOP made by the preceding Chavalit government. These reversals meant wider setbacks – for Thai highlanders who had won some rights to live in protected areas, for opponents of two other dams in northeast Thailand, and for villagers claiming compensation for Sirindhorn and Pak Mun dams (Missingham, 2003).

In March 1999, the AOP launched a new campaign. It established a protest village occupying several hectares of a public park and riverbank immediately adjacent to the Pak Mun Dam site. The assembly announced that it was abandoning its previous claim for permanent loss of fisheries income. In 1997, Chavalit's administration had agreed to provide 2.4ha of land (or the monetary equivalent at US\$8750 per hectare) for 3080 Pak Mun fisher households. After the Chuan II government refused to compensate, the assembly demanded that the government decommission the dam in order to restore fisheries to the river.

In 1999, another process began that was to prove influential. The World Commission on Dams (WCD) – a multi-stakeholder process funded by a range of development and private-sector donors – was a sophisticated attempt to conduct a series of participatory studies about the performance of large dams worldwide. For its eight in-depth case studies, the WCD asked governments, including Thailand, for permission to study the economic, environmental and social impacts; the benefits, costs and distribution of these impacts; and the decision-making processes

for these dams. WCD chose to study Pak Mun in part because its sponsors considered it an exemplary project. In June 1998, the World Bank's Operations Evaluation Department released a report stating that Pak Mun's resettlement programme was 'overly generous' and denied that the dam caused any decline in the fish population in the Mun (World Bank, 2000). On the other hand, members of the WCD, such as the International Rivers Network, had helped to campaign against the dam.

Thailand has limited experience with formalized knowledge-building multi-stakeholder processes. The only such process during the 1990s was the Constitutional Drafting Assembly of 1996 to 1997 (Phongpaichit and Baker, 2000).<sup>6</sup> Considering the immediate political context at Pak Mun, the WCD assessment was ambitious. Thailand appears to have been the only WCD case study that proceeded while dam opponents staged ongoing protests; tensions required the WCD to hold separate meetings with EGAT and civil society.

In November 2000, the WCD released its Pak Mun case study. The evaluation was critical – of its intended hydropower benefits, the dam delivered only 21MW of actual dependable capacity versus 75MW planned. Thus, its economic cost-benefit ratio, calculated from the higher number, had been overestimated. Furthermore, despite installation of a fish pass, Pak Mun had reduced the diversity and overall supply of fish to income-poor, labour-exporting rural households (Amornsakchai, et al, 2000, Chapter 4). The report included dissenting reviews from the World Bank and EGAT, and responses to those reviews. It was a dense multi-vocal compilation of knowledge.

Unfortunately, despite its well-designed process, the WCD Pak Mun study ended in acrimony. EGAT steadfastly argued that:

- The dam produced peaking power benefits of 126MW to 136MW, consistent with the original feasibility studies justifying the project (EGAT, 2000a, pp102–103).
- The study over-exaggerated the decline in the number of fish species found in the Mun after construction of the dam; the decline resulted from multiple causes and should not be attributed to the Pak Mun Dam alone (EGAT, 2000a, pp105–111).
- By 2000, it had compensated more than 6200 families for fisheries impacts, paying out more than 989 million baht (EGAT, 2000b).
- Grievances were driven by villagers' material incentives for compensation and were manufactured by Thai and foreign environmental NGOs (EGAT, 2000a, p111).

In short, EGAT congratulated itself for producing power benefits and compensating generously, while limiting its responsibility for fisheries decline. Its response to WCD repeatedly took the form of categorical assertions that certain methods and studies were credible, while other studies and methods were invalid (EGAT, 2000a).

The World Bank defended the project, but conceded deficiencies in resettlement planning, the failure of the EIA to account for local fisheries dependence, and lack of consultation with affected people (World Bank, 2000).

A debate between WCD and project sponsors EGAT and the World Bank over Pak Mun's 'dependable capacity' goes to the heart of the dam's benefits. Dependable capacity refers to a threshold level of peak power output, which is exceeded by a given proportion of all peak power output values. It is a measure of reliability. During the early 1980s, EGAT defined dependable capacity of hydropower plants as the value of power production that will be ensured (or exceeded) half of the time.

Based on this definition, EGAT presented Pak Mun's dependable capacity as 75MW to the Chatichai government in 1988 for approval. It took the 75MW figure from SOGREAH consulting engineers (SOGREAH, 1985). To get this result, SOGREAH estimated the dam's average monthly energy production. Averaging, however, leads to overestimating dependable capacity because high values in the time series bias it upwards (Kansuntisukmongkol, 1994, pp51–52).

During the late 1980s, EGAT toughened its definition of dependable capacity, specifying it as power production that will be exceeded 90 per cent of the time, based on long-term hydrological records (Amornsakchai et al, 2000, p26). Based on this later definition, the WCD found that dependable capacity was less than 45MW. Furthermore, analysis of operating performance during 1995 to 1998 revealed:

*The actual dependable capacity of Pak Mun project calculated from daily power output between 1995–1998, assuming that all available power gets assigned to a 4-hour peak demand period, is only 20.81MW. This 21MW is what the Pak Mun project [reliably] offsets in gas turbine capacity. (Amornsakchai et al, 2000, pv).*

The 21MW dependable capacity was only 15 per cent of Pak Mun's total generation capacity. Lower dependable capacity means lower benefit-cost ratios. The WCD argued that if Pak Mun was treated as a 21MW peaking power plant, its economic rate of return would be less than 8 per cent, below the opportunity cost of capital in Thailand, and, hence, uneconomic (Amornsakchai et al, 2000, pv).

The dispute over Pak Mun's 'dependable capacity' was, thus, partly about which method of computing reliability was most appropriate for estimating the power benefits of a hydropower plant. Interestingly, SOGREAH estimated Pak Mun's total energy production accurately, at least during the period of 1995 to 1999, when the dam was operated for maximum hydropower benefit (WCD, 2000, p22). But EGAT planning practice did not adequately take into account the effect of low flows during dry months. These depress peak power output. They also lower the dependable capacity (as defined by a 90 per cent probability of occurrence standard).<sup>7</sup>

Adverse media publicity surrounded successive drafts of the WCD report (e.g. Chang Noi, 2000). Drafts were leaked on several occasions to the press by dam opponents participating in the WCD process. Finally, conflict over Pak Mun intensified in May 2000, when protesters blockaded the powerhouse. Both the WCD report and the media coverage caused project proponents EGAT and, to a lesser degree, the World Bank to lose face. All of these factors provided EGAT motive and ammunition to attack the conduct and integrity of the process.

For encamped protesters, however, the emerging WCD findings provided a significant morale boost (AOP, 2000). In May 2000, after more than a year of government inattention to their protest village campaign, the Assembly of the Poor dramatically escalated its campaign. It launched a sit-in demonstration, disrupting access to the Pak Mun Dam powerhouse, as well as a simultaneous blockade of Rasi Salai, an upstream irrigation dam in Srisaket Province. At Pak Mun, the protesters denied EGAT staff access to the powerhouse for a number of days. They later agreed to move aside a few metres so that access could continue.

This dam blockade achieved what months of sit-in demonstrations outside Government House since 1994 could not: it conveyed to EGAT senior management that they needed to take much more active measures to resolve the conflict (Surapong, interview, 20 August 2004). In June 2000, Chuan's cabinet established a bilateral Neutral Committee to Solve Problems of the Assembly of the Poor. It was chaired by Bantorn Ondam, a former academic and respected social activist. Bantorn had previously served on the 1995 fisheries compensation negotiating committee chaired by Plodprasop Suraswadi.<sup>8</sup>

The committee's findings were 'overwhelmingly in support' of the assembly's positions on all disputed issues, which included land tenure, just compensation and the need for further impact assessments at several large dams (Missingham, 2003, p207). For Pak Mun, Bantorn's committee recommended a four-month experimental opening to restore fisheries migration (NC-AOP, 2000).

Chuan initially downplayed Bantorn's committee findings, treating them as non-binding advice. However, he and his advisers revised their positions one month later, when a contingent of assembly demonstrators again rallied outside Government House. They staged a night scaling of the perimeter walls on 16 July 2000, an event that ended in bloodied heads, several hundred arrests and condemnation in the print media about police violence (*Nation*, 2000; Chalermripinyorat, 2004). A week later, Prime Minister Chuan ordered EGAT to open the gates of Pak Mun. But the government justified the action as a special operation to manage unusual flooding that year, and EGAT closed Pak Mun in late October once the flooding subsided.

During the remainder of 2000, a small contingent of protesters remained outside Government House to pressure Prime Minister Chuan to reopen negotiations, but without success. By this time the economic crisis had truly set in; Chuan faced regular calls from critics to dissolve parliament and call fresh elections.

## Contention under the Thaksin government, 2001 to 2003

In January 2001, Thaksin Shinawatra toppled Chuan in the national elections. In March, acting on campaign promises, he visited AOP protesters encamped outside Government House. His government quickly established a Committee to Resolve Problems of the Assembly of the Poor led by Deputy Prime Minister Pongpol Adireksan; but the committee included no representatives or observers from the AOP.

In April 2001, three days after the final contingent of protesters returned home, Thaksin's cabinet accepted the recommendations originally made by the Bantorn committee: it ordered EGAT to open all eight sluice gates of Pak Mun for four months, during May to August, and for Ubon Ratchathani University (UBU) to conduct a multidisciplinary study.

Pongpol's committee set up several sub-committees. The university study was to be submitted to a task force chaired by the university's president. This group included representatives from the university, EGAT and the AOP. It was supposed to report directly back to Pongpol's committee. In addition, EGAT commissioned its own study, led by the Thailand Institute of Scientific and Technological Research (TISTR et al, 2003). A notable component of this study consisted of questionnaires administered to 94 per cent of the 6176 households that had received fisheries compensation. Villagers themselves, coordinated by Southeast Asia Rivers Network (a Thai NGO that campaigns against large dams), initiated the participatory *Tai Baan* research project to document all fish species caught by villagers, along with other evidence of ecological change in river condition (Sretthachau, 2002; see also Chapter 7 in this volume).

The new studies were attempts to generate different knowledge discourses from which to argue competing options: should Pak Mun Dam open indefinitely, as opponents demanded? Should it stay closed to generate hydropower, as EGAT would prefer? Should it, as a compromise, open seasonally and, if so, during what months and based on what evidence?

By the end of the first four-month trial opening period, the AOP felt that it had strong evidence that the opening had allowed fish migrations to occur. Some activists embarked on a long march to publicize the good news. In December 2001, the four-month experiment was extended to *one year* after the trial dam opening task force accepted an argument from its AOP member that the study needed a full year to observe all seasonal effects. In June 2002, a few days before the one-year opening of the dam was to expire, EGAT offered to open Pak Mun Dam seasonally, from July to October, ceding the option to generate hydropower from approximately 52 per cent of the river's average annual flow.<sup>9</sup>

UBU began presenting findings in September 2002. It reported that although households interviewed wanted irrigation water in the dry season, new river-pumped irrigation systems would have a minimal positive impact. Soils were poor, pumping costs were high and farmers lacked capital inputs needed to grow

high-value dry season crops. For at least another five years, the dam's chief benefit – improving electric power reliability in the lower northeast – could be substituted by increasing electricity imports. Technical substitutes existed for goods provided by the dam; but none existed for improving the security of community-based livelihoods (UBU, 2002).

Nevertheless, in October 2002, Thaksin's cabinet, acting on the recommendation from Pongpol's committee, resolved that Pak Mun would henceforth be operated with a four-month seasonal opening. The AOP quickly denounced this decision, taken without benefit of public deliberation, and prior to final submission of the university's government-commissioned report.

The following month, on petition by the AOP and its allies, the Senate Committee on Public Participation held a hearing. EGAT Governor Sitthiporn Rathanopas conceded that EGAT could reliably supply the lower northeast's growing power needs by expanding transmission lines – hence, hydropower from Pak Mun was not indispensable. Based on this admission, university President Mongkhon Visetsuk reversed his position and backed a year-round opening for Pak Mun (Foran, 2006, Chapter 7). In December 2002, following unexpected harassment of demonstrators outside Government House, Prime Minister Thaksin intervened in the case, ordering the National Statistics Office (NSO) to survey occupations and attitudes towards dam management of residents in the Lower Mun Basin. NSO reported that among 3750 householders sampled from 150 villages, the least disruptive and most favoured option was a four-month dam opening. Only 4 per cent stated that fishing was their primary 'occupation' (*achip*); less than 7 per cent stated it was their secondary occupation (NSO, 2003).

Several weeks after the poll, NSO held a public meeting about its survey. Dam opponents argued that in the context of rural livelihoods, it would have been more accurate to ask villagers about their fishing activities, not if they regarded fishing as their 'occupation'. One villager asked: 'Why didn't you gather information using wording such as "*Pho Yai*" [grandfather], do you have children or grandchildren that fish?' This implied that the response to this question would have been different than to questions based on *achip*.<sup>10</sup>

In any case, in January 2003 the cabinet reiterated its resolution to operate Pak Mun Dam with a four-month opening, while offering a package of limited support for fisheries-dependent villagers. On 29 January 2003, some 500 villagers outside Government House were evicted by the Bangkok governor. As of 2008, the 14 January 2003 cabinet resolution still represents Thailand's basic policy statement regarding the value of Pak Mun and its future mode of operation.

### **Pak Mun politics since the decision on the four-month opening**

As part of the 2003 cabinet resolution, the Royal Irrigation Department announced an 807 million baht (US\$20 million) five-year pumped-water project to expand

existing stations and to build new works. Investment focused on villages in the upstream vicinity of Pak Mun Dam, but would eventually extend almost 80km upstream towards the provincial centre. The Pak Mun Irrigation Project was framed as a special development project and did not require a cost-benefit test. The project would build a constituency of local people interested in dam-induced high water levels.

Pumped-water irrigation supplies river water to fields by large electric pumps mounted on floating platforms.<sup>11</sup> First provided during the 1980s, about 70 such systems exist on the Mun River in Ubon Ratchathani. But as of 2003, the three Lower Mun districts of Phibun, Khong Chiam and Sirinthorn had only 16. Unlike gravity-fed irrigation, which is currently supplied without user charges in Thailand, farmers using pumped water had to pay up to US\$2 per hour in 2002.

As part of the UBU study discussed above, a team from the Faculty of Agriculture studied farming practices in four districts in the Lower Mun. They found that pumped water was used primarily at the end of the dry season to raise rice seedlings for the main rain-fed rice crop, and, second, to grow higher-value crops, such as watermelon and chillies, and to stock fish ponds in the dry season. However, in 2000 to 2002, the average usage rate in the existing scheme was only 14 per cent of the total projected irrigable area (UBU, 2002, *p.khor-6*). Dam supporters argued that during the trial dam opening, water levels in the Mun were too low to operate the pumps, but UBU (2002) concluded that such problems could be solved with relatively minor retrofits.

To better accommodate wet season upstream fish migrations, the AOP requested the Thaksin government to allow Pak Mun's annual four-month opening to begin slightly earlier, in May rather than June. The change was agreed and announced in June 2004. But since then implementation of the dam's four-month opening policy has been far from smooth.

In April 2007, six months into the military-appointed government of Prime Minister Surayud Chulanont, 3000 pro-dam villagers (mobilized by the KVHG) rallied at the provincial hall to keep the gates closed and, thus, to overturn the 2004 Thaksin cabinet resolution. As well, local leaders, allegedly with the backing of the National Security Council junta and EGAT, organized a survey of 8091 Lower Mun households (AOP, 2007; Sangsok, 2007). Administered by village headmen and household heads, the survey asked for the name, identification number and signature of each household member, and for a simple yes/no response to the question of whether EGAT should store water at 106m to 108m amsl (i.e. normal operating levels for power generation).

In late May 2007, on the recommendation of the Ministry of Energy, Surayud's cabinet resolved to open Pak Mun in June. But shortly after this announcement, results of the new survey were presented privately to cabinet, claiming overwhelming support for dam closure from 20,592 people (8091 households). On the basis of this unpublished survey (see discussion below), Surayud's cabinet then reversed its earlier decision and decided on 23 June 2007 to keep Pak Mun *closed*. This

triggered another protest rally in Bangkok by the AOP. After pressure from NGOs, academics and criticism in the broadsheet print media, the Surayud government finally resolved in July 2007 to delegate decision-making about Pak Mun's opening and closing to the provincial governor.

## Understanding operating decisions during the 2000s

For dam opponents, the 1997 economic crisis ushered in the unfriendly second Chuan Leekpai administration, but also hastened the passing of the 1997 Constitution, which protected a much higher level of civil liberties. The crisis increased calls from farmers and business people alike for governance reform. These events were conducive to the rise of Thai Rak Thai, the first political party offering coherent policies to benefit both constituencies.

The manner in which activists' claims were processed depended upon framing contests between dam opponents and the state. These unfolded over time and were contingent on micro- and macro-political contexts. Some contexts, such as norms of conflict management and participation, were durable. Some were novel, such as the widespread groundswell for reform after the 1997 crisis and Thai Rak Thai's populist policy initiatives (initially well received by anti-dam villagers).

After Thaksin's unprecedented decision to have a trial opening in 2001 to 2002, EGAT proposed a four-month opening policy. It made the offer in 2002, prior to a formal decision from government, to pre-empt more drastic concessions. Although activists rallied against it, and academics urged Prime Minister Thaksin to declare a year-round opening during a televised hearing in late 2002, his administration regarded this as too regressive and institution-bending for the state. By allowing only a face-saving four-month opening, Thaksin and his men defended their party's vision of development and their authority to rule. In doing so, they also upheld dominant institutions.

The January 2003 cabinet resolution was followed by a five-year period in which Pak Mun's seasonal opening and closing were periodically disputed at the local level. Operating rules were not significantly elaborated upon. This pattern shattered in early 2007 under the military-appointed Surayud government. EGAT and its allies in the military intervened; the government reversed its operating policy. After renewed criticism, it devolved detailed management responsibility to committees reporting to the provincial governor. Such *ad hoc* problem-solving characterizes Thai policy-making when elites face popular pressure (Foran, 2006).

Both the four-month seasonal opening decision under Thaksin (2003) and the short-lived year-round dam closure decision under Surayud (2007) were justified based on surveys of citizens' preferences. The validity of rapid, high-n, non-confidential sampling on a politically sensitive issue is debatable (Foran, 2006). However, assuming that the responses accurately captured local people's opinions, why did local households who won fisheries compensation during the 1990s and early 2000s turn away from the assembly's position in subsequent years?

We suggest an explanation that involves:

- the power of broad development discourse (hegemonic storylines promising water security);
- the power of specific counter-framing rhetoric (e.g. ‘the dam has already been built, so why not use it’); and
- the unpopularity of the AOP (see Foran, 2006, for detailed political analysis).

This unpopularity was a contingent and emergent outcome of multiple rounds of struggle, during which time state agents ultimately prevailed in framing dam critics as a disruptive social force, even as they set new agendas and delivered unprecedented benefits to protesters and free-riders alike.

During the 1990s, authority delegated to provincial-level committees failed to resolve conflicts over compensation, particularly fisheries compensation. In early 2008, however, the Provincial Pak Mun Dam Commission chaired by Governor Chuan Sirinuntaporn stressed reconciliation and participation of affected people (supporters and opponents), local NGOs and academics. The second author (Kanokwan) is a member of a steering committee on quality of life, development and resilience of affected people. In May 2008, this sub-committee recommended rigorous monitoring of dam opening and closing, and quantification of fisheries and agriculture benefits. It also raised the larger question of how to improve developmental outcomes for the Lower Mun River Basin people during the eight months of the year the dam is closed.

Will devolution lead to structured deliberation? Detailed and participatory monitoring of livelihood outcomes might weaken the authority of EGAT and RID. On the other hand, it might institutionalize more effective use of knowledge in decision-making, and contribute to conflict resolution via structured deliberation.

## **PAK MUN DAM: PERPETUALLY CONTESTED**

This chapter presented Pak Mun as an important case in dam decision-making, one that has mobilized large numbers of supporters and opponents, and contributed to the reshaping of state–society relations in Thailand. A dam planned and implemented with low transparency and accountability helped to trigger an unfolding, emergent series of disputes. Disputes over Pak Mun attempted to democratize an authoritarian state. The movement against Pak Mun has helped to socialize Thai society in order to tolerate, and participate in, vigorous street demonstrations. It helped to open up new spaces for deliberative politics: on campuses, in the offices of independent organizations set up under the 1997 Constitution (e.g. the National Human Rights Commission), and – when routine politics fails ordinary people, as it often does in Thailand – on the street.

Pak Mun offers lessons about rhetoric contests in a democratizing setting. The manner in which activists' claims were processed depended upon framing contests between dam opponents and the state. By 'framing' we refer to rhetorical work deployed to champion a particular interpretation. Such discourse ranges from terse speech acts (e.g. 'Pak Mun opponents [or supporters] are paid to protest') to more elaborate rhetoric in policy statements and scientific reports. Framing by power-holders is particularly worth tracking. It justifies government inaction on activists' demands. In closed venues of final decision-making, such 'counter-framing' disarms radical policy narratives. One important example is the shifting justification of Pak Mun heard repeatedly over the years of the project. It took the form: 'The project has already been approved', or 'Construction has already started', or 'The dam has already been built' so 'therefore the project must proceed'. Framing contests are driven by competing interests; but as discourse they also constrain what can be imagined and what is reasonable.

In addition to authorities and activists, mass media and technical experts also engaged in framing disputes. Dam opponents presented themselves as worthy citizens and courted media coverage; but coverage, following norms of news reporting, required campaign escalation. Media framing was divided: more serious broadsheets provided detailed and sympathetic coverage. High-circulation papers have been sites of hostile counter-framing (Chalermstripinyorat, 2004). Most technical studies were commissioned by EGAT or the state in an attempt to inform or legitimize decision-making. When experts were called in to assess debates over Pak Mun, the knowledge they produced was not neutral and immune from attack by contending parties, including the original research sponsors.

Pak Mun offers sobering lessons about politics of knowledge. Sustained production of knowledge for dispute resolution (e.g. the WCD study) occurred relatively late in time. This meant that knowledge production did not always contribute in a 'rational' way to informed negotiation. New knowledge could, instead, trigger reactive framing, as, for example, when Thaksin's advisers disputed the findings of Ubon Ratchathani University (2002) and ordered an opinion poll. Concepts such as dependable capacity, occupation, fisher and farmer were contested by laypeople and by experts using different methodologies. Contending research sponsors required simple conclusions on key issues such as the importance of wild-capture fisheries to local livelihoods. They ignored the nuances of smallholder livelihood strategies. With authority highly concentrated in the state's executive branch, knowledge production was manipulated. The 'politics of knowledge' thus should not be abstracted from the politics of blame, threat and other forms of contention present in a particular dispute (McAdam et al, 2001; Foran, 2006, p6).

What practical lessons does Pak Mun offer? Proponents of large water infrastructure in Thailand such as EGAT have been compelled to move to neighbouring countries such as Laos or Myanmar/Burma to build projects that can supply power and water to Thailand. Analysts and advocates for affected people

– not just in Thailand, but as a result of Pak Mun’s international prominence – have learned to question all project studies from their inception (the fundamental need for the projects), extending to ramifying impacts (WCD, 2000). Civil society actors have learned to mobilize, often in cross-scale coalitions, and to re-politicize knowledge and capture public arenas of deliberation by undertaking, compiling and publishing their own data and research. After 20 years of debate over Pak Mun, some infrastructure sponsors have learned to approach complex questions of livelihoods restoration with more humility.

Far from disappearing under agricultural modernization, Pak Mun shows that dependence upon wild-capture aquatic resources persists. This important finding from relatively ‘modern’ Thailand implies that hydropower development will lead to even stronger negative impacts for small farmers elsewhere in the Mekong region. With national economic development as the overriding priority, rural people face a spate of large new water proposals, wrapped in powerful discourses of modernization and poverty alleviation. In practical terms, how might reformists encourage better decision-making? Reforming water and energy governance challenges power interests and institutions; therefore, advocates encounter resistance. They can expect counter-framing, oppositional elite intervention and rejection of dialogue. Advocates of improved governance and sustainability could, nonetheless, promote particular combinations of processes. One idea is to promote processes that are scientifically credible and legitimate to different stakeholders, while savvy about the many faces of power.

Will the provincial-level management initiated in 2007 lead to reasoned problem-solving? The answer hinges on stakeholders’ ability to agree upon and formalize decision-making processes. Otherwise, as we saw, concessions such as the seasonal opening can be withdrawn. For any operational policy at Pak Mun to work, it also needs to be presented and run as an experiment aimed at delivering meaningful livelihood outcomes to supporters and opponents alike. If not, both factions – which claim to represent poor farmers – will abandon it in favour of prior understandings.

In 2008, Thailand’s instantaneous peak demand was less than 21,395MW. Pak Mun running at 136MW would have lowered it by 0.6 per cent, equivalent to the peak demand of two large commercial buildings in Bangkok.<sup>12</sup> The dam has made a slim contribution to energy security, but generated two decades’ worth of hardship for those who dared question its value, spoke up about its impacts upon their way of life, and pushed for a better deal from the state.

If Pak Mun’s fate is to be perpetually in dispute, it is for several good reasons. There are competing interests and contested interpretations. A nuanced understanding requires going beyond an engineer’s worldview, optimizing trade-offs between power generation, wild-capture fisheries and water for pumped irrigation. It also demands that we understand rural development as an ongoing intensely political conversation. During two decades of such conversation, some of the most articulate

voices on how to sustain resource-dependent livelihoods in the face of change and regional integration have come from the activists at Pak Mun.

## NOTES

- 1 Elected village headmen report to appointed sub-district officers (*kamnan*). Both serve as line officers of the Ministry of Interior.
- 2 In addition to its long-standing role articulating Thai post-World War II development policy, the World Bank has been a significant lender to Thai energy projects, though not always the majority financier. In the eyes of commercial banks, the bank's various project review processes reduce political risk. Associated with World Bank project review are channels for foreign donor and transnational advocacy (Fox and Brown, 1998).
- 3 By repression we mean any deliberate action by authorities or bystanders that increases the difficulties of collective action (della Porta et al, 1996).
- 4 The two leaders were charged with offences related to a construction site protest occupation in early 1993 and released on bail.
- 5 The Assembly of the Poor, a national social movement organization, emerged in late 1995. Resistance against Pak Mun constituted one of its core local networks (Missingham, 2003).
- 6 In late 1987 the Prem government commissioned a multi-stakeholder process chaired by General Tienchai Sirisamphan to review Nam Choan Dam (Foran, 2006, Chapter 4).
- 7 The World Bank (2000, p127) claimed that it had anticipated the intermittent nature of Pak Mun's hydropower production. It claimed that the energy Pak Mun generated during the wet season allowed Thailand's large storage dams to save water, which they could release for power production during the dry season. In response, the WCD noted that EGAT had presented no evidence of coordinated inter-seasonal power production.
- 8 Plodprasop served as director general of the Department of Fisheries during 1989 to 1997.
- 9 Critics argued that less than 100 per cent of total annual flow was available for power generation to begin with. Some rainy season peak flow events force EGAT to spill flood water (Amornsakchai et al, 2000), so EGAT's 52 per cent figure is an overestimate. EGAT has, however, ceded the option to generate electricity during those months.
- 10 Foran (2006, Chapter 8) provides an extended discussion.
- 11 Canals are concrete lined, approximately 2m wide, and run inland with occasional branches for a total length of 3km to 4km. Water reaches fields through simple openings that can be raised by hand. Requesting water usually requires agreement among three or four farmers, and the pump is operated by a resident employee of the RID.
- 12 Chuenchom S. Greacen, pers comm, 10 September 2008.

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