### SOCIAL IMPACT ASSESSMENT

## CAN SIA EMPOWER COMMUNITIES?

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Public participation in social impact assessment (SIA) has been identified as a source of improved decision-making about resource development in several countries, with an implicit assumption that this sort of participation provides an avenue for empowerment of affected communities in these decision-making processes. This paper provides a critical discussion of the effectiveness of SIA as a means of local empowerment through case studies of resource projects in Australia, Canada, and Southeast Asia.

Public participation in social impact assessment (SIA) has been identified as a source of improved decision-making about resource development in several countries, with an implicit assumption that this sort of participation provides an avenue for empowerment of local communities in these decision-making processes (Burdge and Robertson 1990; Garcia 1983; Priscoli 1983; but also see Canan 1989; Gale 1983; and Gariepy 1991). This paper provides a critical discussion of the efficiency of SIA as a means of local empowerment, drawing on the authors' multinational experience of resource projects in Canada, Southeast Asia, and Australia.

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Developments in Social Impact Assessment

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Craig (1990) has provided a useful distinction between "political" and "technical" approaches to SIA, arguing that with a political approach to SIA "a closer connection can be made between SIA and the policy and planning process" (1990, p. 45). It is clear, however, that the technical approach which Craig distinguishes from an overtly political approach, also has significant political content and consequences, promoting a corporate and state power rather than fostering community development or empowerment (Howitt 1989, pp. 159-160).

Building on the benchmark work of the East Kimberley Impact Assessment Project (Western Australia), Ross (1990) supports a perspective related to Craig's "political" approach, which she labels community SIA. This requires, Ross suggests, a cumulative view rather than a project-based approach and involves a high level of community control. In many ways, the East Kimberley Project tried to apply Berger's approach to formal SIA (Berger 1977), into a less formal setting. While this approach clearly shifts the balance of power toward the impacted communities, its wider application is influenced by political processes that demand formal procedures and positive community responses to projectbased development without support for community-controlled research into cumulative impacts of regional changes.

In the context of resource-based projects, social, ecological, economic, and cultural changes experienced at the local level may involve impacts on regional and local development. It is now recognized that these impacts are still underevaluated and not sufficiently taken into account in many decision-making processes. For many communities, existing exogenous models of control and management of local resources, and their relations with indigenous approaches, have not only economic and political importance, but also play a major role in cultural identity and consequently in local development (Bassand 1990). Changing patterns of resource ownership, use, control, and management, therefore, have far-reaching consequences in these settings. This is apparent in the context of Aboriginal people affected by the Comalco bauxite mine in Northern Australia, or the peasant communities impacted by dam developments in Southeast Asia, and the remote urban and rural communities of Canada and Australia all of whom are claiming greater autonomy in decision-making and more local control and management of resources.

To date, most of the compelling work on local empowerment in SIA has been linked to indigenous peoples' organizations (Geisler et al. 1982; Gondolf and Wells 1986; Howitt 1992a; Mulvihill and Keith 1989; Nottingham 1990; Ross 1990b; 1992). Yet there are also examples of regional and urban planners and other groups who are interested in local empowerment through bottom-up responses to the impacts of changing control and management of local resources (e.g., Newcastle Ecology Centre 1980; Sthör and Taylor 1981). There has also been incorporation of some of the participatory approach of local empowerment into the discourse of institutions such as the World Bank, normally associated with top-down approaches to development (e.g., Hirsch 1991; IWGIA 1991).

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This paper pursues three interrelated objectives in contributing to debate on the issues of local empowerment and SIA:

- 1. Reflection on recent experience of social impact assessment (SIA) of resource projects affecting people and environments in three contrasting localities in Canada, Australia, and Southeast Asia;
- 2. Construction of a framework that incorporates formal and informal, technocratic and participatory approaches to SIA, and allows for consideration of the interactions between them as a means of achieving improved local outcomes in resource management and decisions; and
- 3. Demonstration that SIA can empower communities affected by resourcebased projects.

In pursuing these objectives, we acknowledge that considerable ambiguity and confusion exist in key terms and concepts. For example, terms such as locality, SIA, and empowerment, along with categories such as state, capital, and community are all subject to debates relevant to these objectives. This paper, however, aims not so much to clear up these ambiguities and confusions, but rather to show how a critical questioning of categories, readily incorporated into analysis as conceptual givens, may contribute to improved practice of SIA.

Central to the opportunities for local empowerment involved has been the existence of tensions and contradictions within the ranks of entities commonly assumed to be defined as homogeneous—the "state," "capital," and "locality," In the Quebec case, municipal and regional governments, often uncritically supportive of any economic proposals, provided only conditional and divided support for Hydro-Quebec's proposal. In the Thai case, the previously unimportant and divergent provincial interests emerged as an influential coalition to challenge the hegemony of national government institutions. In the Australian case, staff within the mining company itself supported involvement of local indigenous people in a genuinely participatory review of the proposal. The importance of these changes and tensions open up opportunities for using SIA to pursue increased local empowerment and development.

#### Case Studies

Three very different social, cultural and physical settings in Quebec, Western Thailand, and North Queensland have been chosen for the case studies presented. Each deals with proposals to develop large-scale projects to exploit natural resources in previously remote localities. In each case, a formal impact assessment was required as part of the project review and decision process. In each case study, a dispute between the social actors and the proponents highlighted the inadequacy of initial approaches to impact assessment for addressing social and environmental concerns with the proposals. In each case, CHRISTIANE GAGNON, PHILIP HIRSCH, AND RICHARD HOWITT

the outcome remains undecided to some extent, but the political campaigns involved at several scales have had significance well beyond the individual projects, such as the question of energy demand and export (Quebec), regional geopolitics (Thailand), or mining operations and indigenous rights (Australia).

## Canada: Quebec's Disputed Ashuapmushuan River

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The Ashuapmushuan is one of Quebec's wild rivers. It is 193 km in length, flowing into a vast hydrographical basin, covering an area of 15,000 km<sup>2</sup> (Figure 1). This area is under the jurisdiction of two Regional County Municipalities (MRCs) in the region of Saguenay- Lac-Saint-Jean: the MRC Domaine-du-Roy and the MRC Maria- Chapdelaine. The combined population of these two MRCs exceeds 60,000 inhabitants. In 1989, Hydro-Quebec revised an earlier proposal to construct four dams in this area, announcing its intention to construct two dams (778 MW), and create two reservoirs of 610 km<sup>2</sup> (Figure 1). The Ashuapmushuan project was based upon projections made by Hydro-Quebec, which foresaw an increase on the provincial demand for electricity by 2.7% in the next 20 years (Hydro-Quebec 1989, p. 5).

This hydroelectric project is part of the new Quebec provincial government policy that aims to increase Hydro-Quebec's output to 30,000 MW, with a manageable further potential<sup>2</sup> of 18,000 MW, in order to make Hydro-Quebec a "driving force of the economic development" (Quebec 1988, p. 48). This policy relies on the expansion of the industrial sector within Quebec, particularly relocation of aluminum plants and export of electric power. Export contracts have already been signed with the United States. The objective is to export around 10% of the hydroelectric production by the year 2005.3 However, the cancellation in March 1992 of a 1000 MW contract by the New York Power Authority (NYPA) prompted deferral of the work schedule for the proposed Grande-Baleine and Ashuapmushuan dams (Le Quotidien, 28/03/92 and 01/04/92).

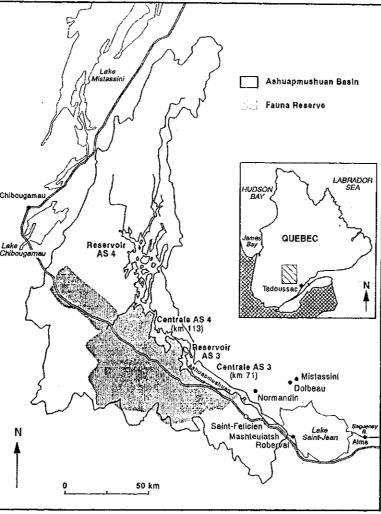
Historically, the region of Saguenay-Lac-Saint-Jean was the first in Canada to experience intensive exploitation of hydroelectric power for industrial purposes, when Alcan Aluminum Company developed more than 2000 MW, largely on the Saguenay and the Peribonca Rivers. In 1982, Hydro-Quebec abandoned its original project on the Ashuapmushuan because it faced the recession, a surplus of electricity, a decline in demand, severe environmental impacts (Hydro-Quebec 1989, p. 3) and regional opposition. Seven years later, Hydro-Quebec has revised and revived its project, which has started a lively debate. Three types of protagonist defended different points of view of the revised proposal. The

<sup>&</sup>lt;sup>1</sup> For relevant examples of these debates, see Smith 1989; Kemp 1987; Jonas 1988; Howitt 1992b inter alia.

<sup>&</sup>lt;sup>2</sup> Putting aside the Ashuapmushuan River, Hydro-Quebec is studying the feasibility of a number of other sites as well as the megaproject of Grande-Baleine (James Bay).

3 In 1992, the exportation will reach close to 7% (Entrevue Hydro-Quebec: 03/27/92).

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Source; Hydro-Quebec

FIGURE 1. Location of the Ashuapmushuan Fauna Reserve within the Ashuapmushuan Basin, Quebec.

proponent, Hydro-Quebec, emphasized the social acceptability of the project. An unconditional opponent of the proposal was The Coalition for the Protection of Ashuapmushuan (RPA), which advocated complete conservation of the river. The

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two counties and additional municipalities emerged as conditional protagonists, seeking maximization of the economic benefits for the local communities.

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Within the context of recent consultation led by Hydro-Quebec, about 100 individuals and organizations responded, mostly with conditional or restrictive submissions. 4 On the side of the opposition, the RPA, made up of 12,000 members, obtained the support of some 40 organizations including unions, municipalities, and regional and provincial groups. The Council of the Montagnais of Mashteuiatsh (Figure 1) disapproved of the proposal (*Le Quotidien*, 01/22/91). As for the regional population, two opinion polls, carried out at the expense of the RPA, concluded that two out of three people opposed the dam. Will the opposition be judged sufficient for the project to be abandoned, an outcome acknowledged as possible by Hydro-Quebec? In fact, negotiations were taking place between Hydro-Quebec and the MRCs to obtain guarantees on local economic results and complementary studies.

The preliminary impact study, carried out by Hydro-Quebec and its consultants, gave major emphasis to the physical environment (Hydro-Quebec 1991). In one bulletin, all the impacts were identified as effects on the environment, such as the situation of the natives of Mashteuiatsh. They would be deprived of some 600 km<sup>2</sup> of land for traditional activities such as hunting and fishing, due to the inundation of the territory. This territory, which signifies for the Montagnais, "where we watch for moose," is composed of a multitude of archeological sites because it covers a part of the historic fur trail route from James Bay to Tadoussac (Figure 1) (Hydro-Quebec 1991b, p. 18). As for the forest, the flood would represent a virtual loss of 84,000 m<sup>3</sup> per year of logging (Hydro-Quebec 1991b, p. 18). The construction of the dam would significantly affect reproduction of the fresh water salmon and sport fishing. Some occupations connected with tourism and leisure activities will be permanently altered.

In a region where a lot of jobs depend on the forest industry or more and more on tourism, and where the natives claim territory, a cumulative SIA study (Ross 1990a) should be essential as well as an environmental impact study (EIA). In the pre-project study (stage 1), however, the social impact is a sectoral description of "the human environment" alone, collecting known data (see Hydro-Quebec 1991a, pp. 107–138). There are no alternative scenarios concerning regional development relating to tourism or forestry industries. The study reveals a captive approach which ensures that negative local impacts are not emphasized.

Therefore, while technical and political issues related to the impact studies do exist, the major issue involves the communities' autonomy in orienting their mode of development or setting the conditions for development according to their needs, strategies, and priorities. The report from the Joint Committee, formed by

<sup>&</sup>lt;sup>4</sup> Interview Hydro-Quebec; 03/27/92. On Hydro-Quebec's public consultations see also Gariepy 1991.

Declaration made at the time of the official announcement of the studies of the pre-project in 1989.

<sup>&</sup>lt;sup>6</sup> The Joint Committee report of the two municipalities of Domaine-du-Roy and Maria-Chapdelaine estimated this loss between one and two million dollars.

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the two counties, gives evidence of this issue. They require that, before coming to a decision on the social acceptability, Hydro-Quebec provides:

- · some complementary environmental studies;
- an agreement which ensures that some of the money (\$344 million) will be spent locally;
- the creation of a regional fund, supplied by the revenues and royalties on public and private exploitation (Hydro-Quebec and Alcan) of the hydraulic forces (Comite conjoint des MRC du Domaine-Du-Roy et de Maria-Chapdelaine 1991, p. 12).

In a region historically oriented to resource development, and characterized by unemployment, economic and demographical slowdowns, and increased gaps between the regions of Quebec, the MRC's response is a significant step toward achieving increased control of exogenous projects and on their impacts.

Responses and solutions were identified by the individuals and social groups to stop the project: to develop leisure, forestry, fauna, and cultural aspects (RPA, no date, p. 11); to promote programs of energy conservation; to use of the hydraulic potential still available on the Peribonca, etc. Broadly, what is strongly questioned by many elements of the Quebec population is the necessity, viability, and effectiveness<sup>7</sup> of this type of project. The creation of an independent commission on energy is demanded.

There is a deep unrest in Quebec about formal impact assessment procedures, especially for resources projects. The public consultation process and the "technical" approach to making the assessment have failed to meet the expectations of the affected communities. In the case of the Ashuapmushuan River, the opponents believe that if the project reaches the step of the public hearings, it will already have been lost. They doubt the credibility, the balance of power of the Public Hearings Environmental Board of Quebec,8 and the impartiality of the results of the impact study carried out by the proponent. Then, it happens that the negotiations between the official (elected) protagonists are made before the formal process of assessment. In the present case, the MRC is negotiating with Hydro-Quebec at the pre-project stage. This type of mediation process raises other questions such as the place of public hearings. Whatever happens, the debate on the Ashuapmushuan River involves a strong public demand for community viability, much greater political rationality and accountability in the decision-making process. The present and future needs as well as the apprehensions of the local and regional communities have to be considered by the proponent and politicians.

<sup>8</sup> The cases of the hearings on the banks of Lac Saint-Jean and Soligaz are referred to here.

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Southeast Asia: the Case of Thailand's Nam Choan Dam and its Aftermath<sup>9</sup>

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On April 5, 1988, the Thai Council of Economic Ministers accepted a high-level committee's recommendation to shelve plans to construct the Nam Choan Dam in Kanchanaburi Province near the western border with Burma (Figure 2). This decision was both a culmination of rapidly escalating and broadening concern over the environmental and social impacts of large resource projects in Thailand, and a precursor to intensified public debate and conflict over a host of other resource-related social and environmental issues. In this way, Nam Choan was something of a watershed in popular participation in impact assessment, albeit a participation that continues to lie well outside formal EIA or SIA procedures.

The Nam Choan Dam was initially proposed in 1972 by the Electricity Generating Authority of Thailand (EGAT), the state enterprise responsible for electricity generation nationwide. A 187-m high dam was to provide 580 MW hydroelectric generating potential to feed into the national grid. The World Bank was actively involved as a potential source of loan funding for the project. The dam would be the third major dam on the two branches of the Khwae River, upstream of the Srinakharin Dam on the Khwae Yai (Figure 2), and the largest hydro-project to date in Thailand.

There were several major concerns regarding Nam Choan, primary among which was its impact on the Thung Yai Naresuan Wildlife Reserve. The reservoir would only flood about 4% of the reserve's area, but this would include most of the rare lowland riverine forest habitat and, even more significantly, greatly increase accessibility for loggers and follow-on settlers. Moreover, migration routes for the larger mammals would be disrupted. Six Karen communities would be flooded, all of which had been in the area for many generations. None of these concerns were addressed in any detail in the EGAT-commissioned environmental impact assessment in 1980 (Stewart-Cox 1987). 10

Potential downstream impacts were uncertain. One of the major concerns that emerged during the controversy engendered by the proposal was the threat of dam failure due to earthquakes, with one of Thailand's leading geologists expressing doubts over the wisdom of building a large dam in such a seismically unstable area (Prinya 1987). The dam would have had few irrigation or flood control benefits other than supplementing the storage capacity of the Srinakharin Dam, so the debate became focused around the issue of sacrifices being asked of rural people and environments to cater to urban and industrial development interests.

In 1982, a number of Thai student environmental groups, concerned academics, and other government officials organized a campaign of opposition to

<sup>&</sup>lt;sup>9</sup> Belanger and Bernard (1991) estimated that the cheap price for hydroelectric power of the aluminum industry would represent a loss of \$300 million per year for the Quebec, relative to export of the same amount of power.

<sup>&</sup>lt;sup>9</sup> For more detailed discussion of Nam Choan and its implications, refer to Nart 1984; Stewart-Cox 1987; Prinya 1987; Hirsch 1987; Dhira and Widhanya 1989; Hirsch and Lohmann 1989; Hirsch forthcoming.

<sup>1907,</sup> FIRSCH 1907, Dullia and Aradianya 1907, Firsch and Education 1907, American Edward required EGAT to carry out an EIA for the project.



FIGURE 2. Nam Choan Dam site in Thailand.

the dam and in April 1983 succeeded in having it shelved. At this stage there was little question of local involvement in protest action or petitioning, partly due to the still politically sensitive nature of the area in question, which until very recently had been one of the most secure base areas of the outlawed Communist Party of Thailand. However, concerned officials of the Royal Forestry Department, including the management of the Thung Yai Naresuan Wildlife Reserve, were actively opposed to the dam, to the extent that a decree was issued forbidding government officials, including academics, to comment publicly on the project.

In 1986, Nam Choan was quietly revived. This time, however, the considerable liberalization that was occurring in Thai society, growing concern about deforestation, increased sophistication among urban-based environmental groups, but above all growing confidence among the rural population of the legitimacy of voicing protest within the system, led to a different order of campaign against the dam, one that ultimately involved groups from the Karen who would have been flooded out of their homes and land, through Kanchanaburi

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residents worried about the earthquake risk and further depredations on the province's forests, student environmental groups, to international environmental groups concerned about an area being considered for nomination as a World Heritage site.

Although all of these groups and the coalition of diverse interests contributed to the opposition to the dam, perhaps most novel and significant in the Nam Choan case was response at the provincial level. Past campaigns and controversies over resource projects had usually only emerged at the national level and among student environmental groups, with local opposition rarely being voiced and never being influential. The emergence of a coalition of teachers, lawyers, women's groups, civic and business groups and others in the province of Kanchanaburi was a crucial link between local people's aspirations and Bangkok-based groups. In particular, the leadership of the Kanchanaburi Nam Choan Opposition Centre by the president of the elected Provincial Assembly, and the acceptance of position of secretary by the manager to the Thung Yai reserve (i.e., a civil servant), gave legitimacy to local concerns and allowed the coalition the chance to confront head-on the EGAT insinuation that opposition groups were "communist-inspired," a charge that had in the past contributed to silencing local voices.

In September 1987, amidst public controversy a committee headed by General Thienchai Sirisamphan was appointed to carry out studies by five sub-committees and make a recommendation. Initially the committee appeared to be stacked with pro-dam officials, but by March 1988 public opposition, supported by the media, was such as to leave little option other than to recommend cancellation.

Following the cancellation of the Nam Choan Dam resulting from political pressure from grassroots to international levels, a number of other environmentally sensitive resource projects came onto the national agenda. The three principal recurring areas of controversy have been dams, logging, and reforestation with eucalyptus. Following Nam Choan, the Kaeng Krung, Kaeng Sua Ten, and Pak Mul Dams in the South, North, and Northeast respectively have all met with local and wider opposition. Pak Mul made international headlines in 1991 when for the first time, executive directors of the Bank (being asked to provide partial loan funding for the dam), in Bangkok for their annual meeting, were forced to confront farmers due to lose their land. Logging became a national issue following floods in southern Thailand in late 1988 attributed in part to illegal logging, which led to a national ban on logging in January 1989. Reforestation with eucalyptus has become a major issue in the Northeast as farmers are moved off forest reserve land to make way for plantations (Hirsch and Lohmann 1989).

<sup>&</sup>lt;sup>11</sup> None of these included impact on communities to be flooded. The five areas were: forest and wildlife; seismic potential; economics, energy and finance; archaeological values; water quality and public health (Dhira ad Widhanya 1989).

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A Comment

All these responses to what are at first sight primarily environmental issues have in common local concern at encroachment on rural communities' resource base. It is primarily this material concern that has led to heightened community involvement in resource and environmental debates over Thailand's development path. To date, there are still few channels for integrating these concerns into environmental or social impact assessment procedures, and as a result resource development and associated social and environmental impact remains highly polarized.

The most recent development in this area has been the increasing tendency for Thailand to turn to the natural resources of neighboring countries, particularly for timber and new sources of hydropower in Burma, Cambodia, and Laos. This is facilitated by changing regional geopolitics and is partly due to the greatly diminished natural resource base of Thailand as a result of past exploitation, but it is also due to the much more limited opportunities for community response in neighboring countries. The legacy of Nam Choan, therefore, is highly complex, having provided the precedent to give confidence for increased community involvement in response to actual or impending impacts of resource projects, but also to some extent encouraging a shift to areas where such response is not so easily articulated and organized into simultaneous campaigns at a number of scales.

## Australia: Proposed Alumina Refinery at Weipa, Queensland

Weipa, on the west coast of Queensland's Cape York Peninsula (Figure 3), is the location of one of the world's largest bauxite mines, operated since 1963 by Comalco, an Australian company with links to the Rio Tinto Zinc Corporation group in the UK. <sup>12</sup> Weipa bauxite is integrated into international markets through direct exports and exports of alumina from the Queensland Alumina Ltd refinery in Gladstone, on Queensland's east coast, a joint venture in which Comalco holds a 30.3% interest.

In the 1980s a degree of doubt over the Weipa operation had arisen following dramatic restructuring in the international aluminum industry, including the closure of all alumina refining capacity and most smelting capacity in Japan, previously a major destination for Weipa bauxite exports. In 1990 Comalco announced a proposal to construct a large new refinery at Weipa aimed at reducing transport costs and increasing viability of processing lower ore grades.

During 1990 Alcan joined Comalco in a joint project (Weipa Alumina Plant Project—WAPP) to determine the feasibility of the Weipa proposal. Alcan has held undeveloped bauxite leases adjacent to the Comalco leases since 1965, and their participation in the project increases the likelihood of development of these lease areas by integrating them with the Comalco leases.

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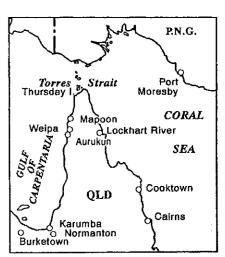


FIGURE 3. Site of proposed alumina refinery at Weipa, Queensland.

An initial advice statement to the Queensland Government in October 1990 reported preliminary investigation of five Weipa area sites. The Whiting site, three kilometers south of the Aboriginal settlement of Napranum, was identified at this stage as the "technically preferred site," although a refinery on the site and its associated infrastructure would have left Napranum completely surrounded by industrial development (Figure 4). Social and environmental implications of the Whiting site for the nearby Napranum community were glossed over in the initial advice statement with an inconclusive undertaking to future action:

The effects on the existing community and social structure including the aboriginal [sic]<sup>13</sup> population in particular Napranum, will be addressed (Hollingsworth Dames and Moore, 1990, p. 29).

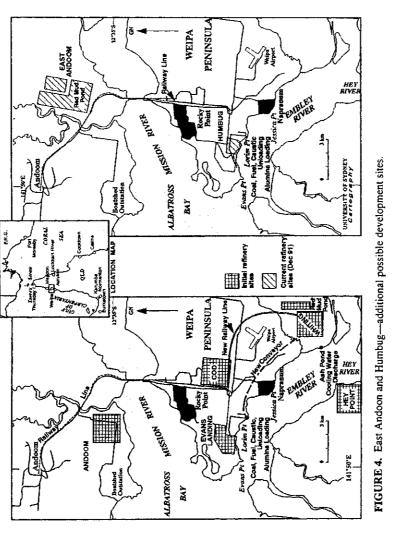
After further investigation and discussions with local community groups, all five initial sites were rejected during 1991. This review identified several additional local sites, including some suggested by local people, as worthy of further investigation. By mid-1991 WAPP confirmed two local sites, East Andoom and Humbug (Figure 4), as possible development sites. These would be compared in detailed studies with an alternative site at Bowen on the east coast.

At an early stage of discussions about the proposed refinery, Napranum Council, the local Aboriginal and Islander community government organization, indicated

<sup>&</sup>lt;sup>12</sup> For overviews the RTZ Group generally see e.g., Howitt and Douglas 1983, ch. 2, and Moody 1991. For more historical background on Weipa see Howitt, 1992c and the references therein.

<sup>&</sup>lt;sup>13</sup> Australian conventions require the word "Aboriginal" to be capitalized. Failure to do so, as in this statement, indicates a lack of sensitivity to Aboriginal cultural and political issues.

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that it would expect to control any impact assessment studies involving the people of Napranum. One of the authors was involved in an independent study of impact issues related to the existing mine at the time this proposal was raised (Howitt 1992b). When asked by WAPP personnel, he counseled that conventional technical approaches to SIA at Napranum would create rather than resolve conflicts between the refinery project and Napranum. He further suggested that a Napranum social impact study should be "participatory, interventionist and responsive to local dynamics rather than adopting the conventions which have marginalised Aboriginal peoples in others EISs" (Howitt 1991, p. 3).

Soon after, Napranum Council and Tharpuntoo commissioned a critique of the proposal as part of the Queensland Government's public process of developing impact assessment guidelines for this proposal. This made clear the Aboriginal community's desire and determination to control any impact research affecting them. The guidelines, however, did not go nearly far enough to meet the Council's expectations. Although the Environmental Impact Study was to be required to:

... specifically address the impact on, and concerns of, Aboriginal communities ... [and that] In these matters there should be close liaison with traditional Aboriginals of the region (Australia and Queensland 1991, pp. 4-5).

the Council felt that Aboriginal people and their organizations should, as a matter of principle, not be seen as optional consultants to be liaised with at the discretion of the developers' impact assessment consultant. Rather, they asserted, they should be empowered to act to address negative impact directly and to engage in the assessment and amelioration of impacts directly. From the Council's point of view it would be completely unacceptable to have an impact study that accurately monitored the speed and direction in which the community was "going down the drain" as a result of negative impacts of development.

For the Napranum community, the refinery proposal raised a number of serious impact issues. First was a series of concerns about being besieged by an influx of construction workers. The proposal to accommodate workers at the Whiting site, where the Napranum Tavern would be the closest bar, was seen as particularly threatening because previously experience in other parts of Australia has confirmed alcohol-related violence and disturbance as a major source of impacts. Second was a complex set of issues concerning existing unresolved impacts from the development of the mine, the mining town, and recent proposals to "normalize" the mining town<sup>14</sup> and recognize Aboriginal land rights. Third,

<sup>&</sup>lt;sup>14</sup> Under normalization proposals, Comalco would take a less dominant role in administration of local government functions in the mining town areas. Prospects for sale of mining lease land to private interests, development of an elected local government structure parallel to the Napranum Community Government Council, and other aspects of the process all raised concerns among local Aboriginal people.

<sup>15</sup> Under the terms of the Aboriginal Land Act 1991, Queensland Aboriginal people have been able to lodge claims for limited amounts of Crown land. Alienation of the former Aboriginal Reserve lands currently covered by the mining and special purpose leases at Weipa was seen as threat to people's ability to pursue longstanding grievances over the unilateral revocation of the Aboriginal Reserve in the early 1950s when bauxite was discovered.

there were serious concerns about the interaction of biophysical environmental impacts and social, cultural, and economic effects on Napranum. The Whiting site area is used for subsistence fishing and other activities, and fears of continued access to these resources existed. There is also an aquacultural industry under investigation by Comalco and local Aboriginal groups, and damage to sensitive estuarine ecosystems was seen as a threat to this. Fourth, all parties had concerns about the effects the proposal might have on generally improving relations between the Comalco mining operation and the Aboriginal population. Finally, the involvement of Alcan, which has held undeveloped mining leases in areas of continuing interest to Aboriginal traditional owners at Weipa<sup>16</sup> for many years, raised serious questions about the expansion of mining operations into new areas.

While the Government's guidelines for the project assessment fell below the standards desired by Napranum Council, WAPP made it clear throughout its discussions with the Council that they not only accepted a high level of community participation in the impact research, but they would also welcome and support this. From Napranum's point of view, this provided a window of opportunity to pursue a community development agenda throughout the impact assessment process.<sup>17</sup> After several months of formal and informal discussions and negotiations Napranum Council and WAPP reached in-principle agreement about the processes to be used for a Napranum social impact study as part of the formal environment assessment of the refinery proposal:

- · the Council itself would be employed as the consultant for the study;
- the Council would have complete freedom to select its own expert consultants in specialist areas;
- the full text of the Council's Napranum social impact study would be published as part of the final EIS; and
- an advisory a committee consisting of WAPP, Napranum Council and its subconsultants, WAPP's principal consultant, and open to others as required, would be established and funded to meet as a forum for free and open exchange and discussion of research in all areas of the EIS.

In September 1991 WAPP announced that it would undertake a detailed review of economics issues associated with the refinery proposal, including a detailed

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comparison with costs at the Bowen site. The Weipa site office was closed and the arrangements for impact assessment research placed on hold for at least twelve months. From the Council's point of view, this removes an unwelcome and unneeded source of social pressure on the community, although prospects for using the Napranum social impact study to formally review unresolved grievances from previous development was something to which many looked forward. It remains a possibility that the project will be revived at Weipa, in which case the Napranum social impact study will again become a focus of community strategies in securing improved Aboriginal participation in local development decisions.

#### Discussion

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Despite the particularities in these three examples, each exemplifies important issues to guide SIA approaches and practice toward community empowerment outcomes. We identify three types of issues: divided power, win-win scenario, and territorially based action.

#### Divided Power

In each case study, nominally unified and powerful actors, generally oriented to specific self-interest concerns within the statutory impact assessment and decision-making, e.g., corporate proponents, state, central, and local institutions, exhibit a range of internal tensions and divisions that created opportunities for locally empowering interventions.

The centralized power of institutions, such as resource transnationals like Comalco, state authorities like Hydro-Quebec and EGAT, international organizations such as the World Bank, and government structures, is fragmenting under various pressures. Recognition of this situation can be an important first step in establishing empowerment strategies relevant to formal SIA processes. Areas of common ground or strategic weakness or grounds for cross-factional and inter-regional alliances may emerge for investigations in this area. Is In many cases, simply recognizing that decisions of powerful statutory authorities and transnational corporations are not independent of human intervention is itself empowering—specific decisions (or even policies) are no longer felt to be irreversible, and possibilities for alteration or even cancellation of undesirable development proposals can be discussed as realistic options rather than pipedreams. Recognition of divided power is a source of empowerment in terms of viable and acceptable responses to affected groups.

<sup>&</sup>lt;sup>16</sup> Under the Queensland Aboriginal Land Act 1991, some limited opportunities for Aboriginal people's traditional claims to land ownership prior to non-Aboriginal invasion and occupation emerged. The land held by Alcan, however, would not be available for claim under this legislation.

<sup>&</sup>lt;sup>17</sup> It is worth noting here that Napranum is not the only Aboriginal community affected by the refinery proposal, although it clearly faces the most direct and dramatic impacts. Aurukun, 60 kilometers south, and Mapoon, 40 kilometers north, will also face significant effects from the proposal. In the wider Cape York Peninsula region, communities at Lockhart River, Iron Range, Coen, and other locations will face impacts from increased local tourism, increased pressure on resources, and other regional impacts. Howitt's involvement with Napranum Council in negotiations with WAPP has restricted his treatment of the broader issues. Although the Council raised the need to ensure high levels of regional Aboriginal involvement in studying the project during the negotiations, they were principally concerned to protect their own local interests rather than pursuing a wider regional agenda.

<sup>&</sup>lt;sup>18</sup> Michalenko (1981) provides a useful overview of the need to assess the corporations producing social assessment as part of the broader SIA process.

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#### Win-Win Approaches to Conflict

The dangers of conventional win-lose approaches to resource decisions are dramatically illustrated in the circumstances surrounding the closure of the Bougainville Copper Mine in Papua New Guinea in 1989. This example highlights the extent to which development of projects on terms that excessively favor a powerful company creates timebombs of social tension that can ultimately destroy most of the apparent benefits generated. If a project proponent can be persuaded to realize that social dissatisfaction can affect long-term viability and security of investments, before decisions are made instead of retrospectively, it is possible for many proposals to be transformed into more locally acceptable forms, from which a wider range of impacted groups derive some direct and meaningful benefits (e.g., acceptable compensation, training, and employment guarantees, associated educational, infrastructural, and other investments valued by the affected groups, even decentralized infrastructure such as power lines from hydro-electric schemes so that affected groups gain the benefits of electrification).

Even where regional or local priorities require abandonment or marked changes to a project, the process of negotiating with the affected social actors affords the proponent an alternative. In the Quebec case, negotiations between Hydro-Quebec and the two MRCs addressed possibilities for a sustainable regional economic development that could lead to a win-win scenario, following agreement to the conditions from all the major intervenors. Local communities did shape alternatives to the proposed Ashuapmushuan project, as well as a change in external circumstances (export markets), a program of energy savings, and more effective use of sites and facilities.

The Weipa case provides a good example of both the positive outcomes and considerable difficulties involved in pursuing a win-win approach. The weakness, from the perspective of the affected communities, is their lack of secure standing in most formal SIA procedures. The agreement secured from WAPP concerning the proposed study for the refinery remains only an in-principle agreement, not a statutory requirement. A change of management, a change of external economic imperatives, or a change of political circumstances could easily see a return of pressures for the companies involved to pursue more conventional win-lose results, in which local Aboriginal people again become marginalized losers in another round of win-lose development decisions in the Cape York region.

In the case of Southeast Asia, failure to involve local people in the Pak Mul and other projects has resulted in severe difficulties for the project proponents and funding bodies. Applying the participatory lessons of the Nam Choan case suggests that potential exists for win-win scenarios to be constructed in these cases, although in the case of another Nam Choan the "win" for EGAT may be

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reduced loss of time, money, or faith rather than ultimate success in going ahead with the dam. Certainly, the prospects for local community participation in constructing win-win outcomes through preparatory studies funded under the new World Bank guidelines (IWGIA 1991) are substantially greater than existed prior to the Nam Choan controversy.

#### Territorially Based Action

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Central to community empowerment is the formation and transformation of political alliances around proposed development projects. In many cases common ground between sometimes antagonistic groups (landlords and tenants; farmers and mineworkers; indigenous peoples and urban middle classes; peasants and environmentalists) establishes the base for territorial action and campaigns. In the context of the opportunities presented to communities in formal SIA processes, these pragmatic alliances present a substantial challenge to political approaches which assume that such coalitions should be entrenched in institutionalized politics. For example, popular front politics often assume that such solidarity is the first step in the creation of a broader national revolutionary politics or foundations for challenges to established political structures. The practicalities of pragmatic community politics generally ensure that the alliances are campaignspecific, temporary, and flexible. As a result a territorially based action may also be tenuous, and vulnerable to all sorts of pressures, from within and without. Nevertheless, they have proved empowering to a significant degree in the cases examined here.

In the case of Hydro-Quebec's proposed Ashuapmushuan project, local and regional governments did a kind of partnership with social forces, and a new alliance was recently done by social groups about a dam project on Peribonca River (harnessed river). Members of the Industrial Commission called the state authority to account. The articulation between the actors in an alternative regional development strategy, including local conservation and tourism projects, wider energy conservation programs and better utilization of existing dam sites, provided a strong challenge to Hydro-Quebec, and enhanced the local and regional value of the proposal.<sup>20</sup> While an SIA that adopts a participatory–emancipatory orientation to disputes does not avoid conflict, it facilitates win–win outcomes through territorially based interventions.

In other cases, links between local affected groups and wider social actors active in multi-scale forums, present opportunities to insert local concerns that would otherwise be characterized as merely parochial, into formulation of decisions and approval procedures. The Nam Choan Dam provides an excellent example of this process at work, as the championing of the local and provincial

<sup>&</sup>lt;sup>19</sup> The timebomb analogy comes from Filer (1990). See also Connell (1991) for background in Bougainville.

<sup>&</sup>lt;sup>20</sup> For a useful parallel to Hydro-Quebec see Crabb (1986) and Thompson (1986) on the role of Tasmani's Hydro-Electric Commission in the case of the Franklin Dam in World Heritage areas of Tasmania.

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In the Weipa case, it was a coalition between local Aboriginal groups and the regional Aboriginal legal service, and a second tenuous alliance between the Aboriginal groups and a faction within the corporate proponent that accepted the validity of Aboriginal concerns, which provided the opportunity for the Aboriginal group to negotiate a way of controlling the SIA research, if not the actual development proposal itself.

#### A Framework for Community Empowerment through SIA

These points suggest that community empowerment in SIA does not involve any singular, simple form of "preferred research" procedure. Rather a community empowerment approach to SIA involves multi-directional efforts by affected grassroots groups to secure influence over and standing (even if tenuous, circumstantial, or informal) in formal SIA procedures by:

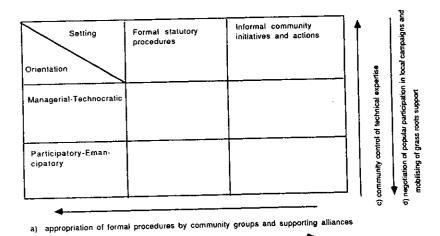
- appropriating the formal SIA procedures to community priorities;
- extending the formal procedures into less formal settings, where avenues for community influence are greater;
- exercising increased levels of community control over technical inputs into SIA inquiries;
- negotiating popular participation in territorially based campaigns for more acceptable local outcomes to project proposals and the mobilization of popular support.

This matrix of processes is illustrated in Figure 5. In this diagram, the horizontal axis represents the degree of formality of the procedures. That statutory requirements may impose specific formal procedures for an SIA is recognized without excluding the possibility that affected communities or groups can independently pursue SIA-style research or a range of other actions aimed at influencing development outcomes. That is, although a formal SIA study may provide some opportunities for community empowerment, it is not suggested that in any particular situation, this would be the only, or even the preferred, option for pursuing community goals. The vertical axis represents the orientation of the SIA process from technocratic at one pole to participatory at the other. There is scope both for communities to establish greater control over technical input and the resources that go with them, and for the more conventional "managers" of SIA to benefit from greater community involvement.

Each of these processes can be illustrated from the case studies presented here. The appropriation of formal SIA procedures by community groups is clearly demonstrated in the Weipa case, where the proponent accepted an arrangement in which a community organization would control the relevant sections of the

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 extension of community groups' influence over statutory procedures in wider political setting

FIGURE 5. Processes in a community empowerment framework for SIA.

formal social impact study. While committing the Napranum Council to the formal research process, the agreement involved adequate protection of those issues emphasized by the Council (full disclosure; access to full range of EIS data; selection of technical experts; one line funding of the Council for the study).

The process of extending the formal procedures into less formal settings, where greater levels of community influence can be developed, is illustrated in the Nam Choan case, where a committee, initially established to justify approving the dam, was confronted with community-based opposition that left it with little option other than to recommend cancellation of the proposal. In this case, the attempt to circumvent community opposition by institutional means was itself circumvented by community-based political efforts that pushed the committee's inquiry into the arenas of greatest community concern and influence.

The Nam Choan case also illustrates the importance of opportunistic coalitions and territorially based action in securing a more participatory approach to impact assessment and development decisions. In this case, extension of these alliances into international arenas has had consequences far beyond the original project, and is, for example, now influencing the development of hydro-electric projects in Indochina.

The important roles played by a regional municipal committee and community-based environmental interests in the Ashuapmushuan case in Quebec highlights the importance of locality-related common interests as a basis for campaign alliances. In this case, the alliance produced negotiation and mediation processes aimed at securing improved environmental and economic outcomes—

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to transform a locally unacceptable proposal into a more widely acceptable one. The relevance of these proposals to local aspirations was central to the development of a politically effective alliance.

Establishing mechanisms for increased community control of technical inputs for formal (and informal) SIA is fundamental to the empowerment process outlined here. Without this, one is really only talking about advocacy, not empowerment.<sup>21</sup> In the Weipa case, control over selection of technical experts was supplemented by direct community presence on the advisory committee. The extent to which these mechanisms would actually deliver community control of the process remains untested following postponement of the study. Ross (1989, p. 12) acknowledges this issue of community control of technical expertise as a difficult area in the East Kimberley study, and there are no unproblematic examples of this process to guide individual practice.

The point is, however, to identify this as a basic issue in the empowerment process. Control of technical inputs into SIA (e.g., who directs the research, what data is used, which scenarios will be considered), and control of the resources needed to assemble, analyze, interpret and debate these inputs, is often the crux of community disempowerment in formal SIA research.<sup>22</sup> As a result, community critiques of technical documents are left to depend on volunteer "experts," independent funding sources, or emotional arguments against technically sophisticated research. Placing technical research at the disposal of community interests rather than solely in the control of project proponents substantially alters the conventional balance of power in impact studies. This was the logic behind Berger's funding of community groups to prepare and present submission to his environmental inquiry in northern Canada (Berger 1977, pp. 241–246). This important innovation, however, remains far from standard practice in the field of impact assessment.

Community strategies targeting basic processes (appropriating, extending, exercising, negotiating, and mobilizing local support) as a means of challenging the conventional power relationships in formal SIA will, as the case studies presented demonstrate, vary considerably in different community settings. The purpose of the framework outlined here is not to prescribe a universally applicable method of "empowerment SIA," but to identify general issues and processes that need to be addressed in developing strategies in particular circumstances. Supplemented with a range of other strategies and interventions—to adapt formal impact assessment procedures into the realm of community research and action—will move formal procedures away from the status of post-facto justifications of predetermined development decisions. This involves recognition of the role of community empowerment in planning and decision-

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making that influences not just quality-of-life, but in many cases, community survival and the viability of future livelihoods in these regions.

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<sup>21</sup> For a useful discussion of the politics of voluntary technical experts in environmental conflicts, see Frankena

<sup>22</sup> This is probably the reason why the Cree, the native community affected by the Grand-Baleine dams project, claimed and received \$5 million to undertake their own \$1A studies concerning that project.

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# IN PRAISE OF SIA— A PERSONAL REVIEW OF THE FIELD OF SOCIAL IMPACT ASSESSMENT: FEASIBILITY, JUSTIFICATION, HISTORY, METHODS, ISSUES<sup>1</sup>

Kurt Finsterbusch<sup>2</sup>

This paper presents an overview of the field of social impact assessment (SIA) in the United States. I argue in the following sections that SIA is manageable and justifiable, is seldom conducted unless legally required, has declined as an activity since the late 1970s, has a widely accepted methodology, and can be conducted at reasonable costs. This assessment of SIA begins with the recognition of the difficulties inherent in the task of predicting all the significant future impacts of events or activities on people and social collectives, but suggests that the task is usually quite feasible for recurring government actions. Next, the ethical foundations for SIA are spelled out. It is justified by all ethically based policy value systems if its costs are within reason.

Impact Assessment

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