

Urban water pollution, communities and the State in Southeast Asia

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Abstract

Southeast Asian cities are confronted with a range of environmental challenges with few success stories. State-driven and top-down solutions have been unsuccessful while communities struggle with developing and implementing alternative strategies which are both affordable and relevant. As a result water pollution is becoming a more serious social and political flashpoint. In part this has been because current and past approaches, which often involve cleaning/beautifying waterways and 'relocating' the urban poor, have proven prohibitively expensive, unsustainable and have invited conflict. Still, there are innovative approaches led by communities and NGOs, sometimes in partnership with government but at other times in opposition to official projects. I examine examples of these, drawing from fieldwork in Thailand. I examine the possibilities for a more positive nexus between local government and communities which lead to cleaner urban waterways and sustainable communities. Some conclusions on alternative strategies are then drawn.

Introduction

Urban water pollution has emerged as one of the more critical forms of environmental degradation in Asia. Whether it is China (Economy, 2004), Vietnam (O'Rourke, 2004), or East Asia (Rock, 2002), water pollution is clearly now on the environmental and political agenda. On the surface water pollution is an environmental issue and is often framed in terms of an inevitable stage of economic development. The contentious environmental Kuznets curve, where the environment initially suffers through economic growth only to recover when the benefits of development 'trickle down', is an example of this thinking (Borghesi, 2002). Solutions are subsequently presented in technical guises, such as waste water treatment plants. However the water pollution which now characterises almost all Asian urban areas is far from a temporary phase in the region's (urban) development and the conflict which is now escalating around environmental issues (see Fahn, 2003) has clearly put pollution on the political agenda.

On the one hand conflict is resulting from the environmental impacts of urban growth, the failure of regulation, and the increase of informal settlements, many of which are un-serviced and lack basic sewerage and sanitation systems. These consequences of unchecked industrialisation have been notoriously difficult to resolve, and few governments anywhere in Asia have managed to seriously address pollution in a sustained manner. Partly this is a result of the failure of State institutions, of the weakness of central and local authorities and the historical lack of importance of environmental issues in the region's desire for prosperity. Where authorities have acted this has usually been in the form of eviction (ACHR, 2003). Grandiose aid-

driven schemes have made limited impact (Storey, 2005) or, worse, have resulted in conflict. The region's urban rivers continue to act as open, and increasingly toxic sewers with few remedies in sight. This is aggravated by the lack of consensus between the State, civil society and business over the sources of pollution, what needs to be done, and by whom.

Part of the problem in identifying paths out of this impasse has been in the identification of the source of the problem and where responsibility lies. Despite the obvious centrality of environmental degradation, conflict is often played out over issues which, for those involved, often transcend the environment. For the urban poor, who are often the target of blame for pollution (despite mixed evidence), environmental issues are also about tenure, rights, livelihoods, responsibilities and citizenship. This challenges institutions that prefer, or choose, to frame the problem in terms of infrastructure, illegality and the lack of resources. In this way, the State often seeks to limit the discourse to the environment, partly for fear of opening up a veritable Pandora's Box of claims and debates which are unresolved in most Asian cities. Subsequently, environmental pollution has increasingly encapsulated and further politicised already existing tensions around the right to shelter, a decent standard of living and human rights. It is often because of these disjunctures, between key players in urban development, that water pollution has most often become a source of conflict rather than an opportunity for partnership.

Framing the problem of water pollution and its causes is essentially a political act representing the relative power of those involved. Even data on pollution is contested, contradicted and massaged to validate a host of conclusions and policy responses. This variance can even occur *within* government agencies assigned a role in environmental policy leading to often contradictory and uncoordinated responses.

In essence the environmental crisis of the region's urban waterways is bound up in the unresolved struggle of control over resources and space, political control and influence, and the governance of cities. As such the urban environment should be seen as part of the contested space, and the contest for space, inherent in Third World cities (Peet and Watts, 1996). But while Douglass has felt pessimistic of solutions emerging because of the continued drive for growth in the face of continued debt, and because governments have shown little ability in dealing with poverty and marginalisation, or moving away from top-down structures (Douglass, 1992:15), the crisis of the region's urban waterways does offer opportunity of sorts. Given that States have had a limited impact on pollution, opportunities have arisen for non-State actors to play a greater role – if only out of necessity.

In Asia these responses have ranged between those hostile to the State to those which seek partnership. Consequently while the political context of free market capitalism has weakened the ability and authority of the State to reign in multifarious sources of pollution (even it wished to), concurrent processes of democracy are opening up opportunities to address environmental change through a reconfiguring of relationships. These are occurring around the environment but also around other unmet physical needs, and arguably are leading to a deepening of social democracy and empowerment. Hence, much of the argument and direction of activity has gone beyond the environment itself, and into issues of citizenship, rights and participation. It is in these domains, I argue, where alternative forms of sustainability lie.

Thailand is an interesting example of these struggles and makes for an important case study for several reasons. Firstly, it is one of the most urbanised regions in mainland Asia and parallel to this urban growth has emerged quite severe environmental degradation, including water pollution. Secondly, Thailand has clearly demonstrated the limited success of dealing with pollution through formal institutions, which often have as their main concern maintaining economic growth. Traditional regulatory means, such as command and control, have also failed to adequately contain the environmental impacts of industrialisation. However a third, and perhaps more salutatory reason is that most recently Thailand has attempted, through quite innovative partnerships, to address environmental issues through the empowerment of marginalised groups. As such, we can assess both the promise and limitations of these more holistic approaches which herald an alternative, and more sustainable, urban future.

Thailand's urban environmental crisis

Thailand has undergone an urban revolution in the post war period and now more than one-third of its citizens live and work in urban areas. In the case of Bangkok, this transformation has additionally been characterised by an outward spread into adjoining regions, which has created an Bangkok Metropolitan Region (BMR) of 7758sq.km. In the period 1987 to 2000 the inner city population density of Bangkok actually decreased from 3.25 to 2.36 thousand/sq.km whereas the outer ring population density increased from 0.67 to 1.12 sq.km (UNEP, 2001:14).

The growth and spread of Bangkok has had significant implications for the ecology of the region. Water, air, and solid waste pollution have reached extreme levels. The city's 1300+ klongs contain a complex mix of both domestic and industrial waste. The growing 'footprint' of Bangkok has been accompanied by a loss in ground cover, deforestation of uplands around cities, contamination of aquifers, and seepage of seawater into water supply sources (Marcotullio, 2001:464).

Setchell (1995:12) states that approximately 1.5 million cubic metres of untreated domestic and industrial pollutants are discharged directly into Bangkok's waterways on a daily basis. In large part, this is a consequence of the inadequate infrastructure and services provided to poor and informal (illegal) settlements, which are characteristic of the larger Thai cities of Bangkok and Chiang Mai. In one detailed survey Daniere and Takahashi found that around 50% of those living in the city's informal settlements relied upon a septic tank, and 85% did not have garbage picked up from their residence. Twenty percent of the remainder did not have any access to a bin and dumped their waste anywhere (Daniere and Takahashi, 1999:534). As a consequence Daniere (1996) estimates 20% of solid waste goes uncollected, but this rate is much higher in informal settlements (cited in Marcotullio, 2001:471). Pollution of the city's ubiquitous waterways also results in significant, and underreported, threats to health. Annez and Friendly (1996) estimate that 6% of annual deaths in Bangkok are due to such water-borne plagues as typhus, dysentery, and encephalitis (cited in Marcotullio, 2001:471).

The shift of demographic growth outwards from the centre of Bangkok reflects industrial relocation. More migrants now go to the five regions around Bangkok than the city itself, as this is where an increasing number of the jobs are. In 1997, the Eastern Seaboard region accounted for the largest shares of Board of Investment (BOI) approved projects (66 per cent), investment (75 per cent), and foreign-registered capital (82 per cent) in the country (Kittiprapas, 2001:371). The industrial shift into Bangkok's hinterlands, especially into the provinces of Samut Prakan and Pathum Thani, has had a significant impact on the metropolitan region's environment. There are some 21,026 factories in the BMR employing 608,088 workers. Most of these industries are small scale and difficult to effectively regulate. Greenberg (cited in Hirsch, 1996:173) found that in the mid-1990s of 3,351 factories in Samut Prakan 2,180 were found to be failing to comply with pollution standards and regulations stated in the National Factory Law of 1992. Some 75% of the nation's chemical producing factories are in the BMR (Kittiprapas, 2001:391).

Increasingly the mix of population, pollution and unchecked 'development' is leading to conflict. Where industrial and domestic pollution threatens waterways and where aquifers and watersheds have been eroded leading to salinity and drought, questions are being raised about the ultimate sustainability of the Bangkok region. Increasingly, this is also leading to questions about governance.

The limits of top-down solutions

Managing and evaluating sources of pollution, assigning responsibility for addressing its impact, and enforcing relations have been relatively absent actions in the governance of Thai urban areas. What is clearly evident is that traditional top-down and government-centred regulation and control has been overwhelmed by the growth and spread of Thai cities (see Askew, 2002: chapter two). In this vacuum private interests have predominated and the needs of citizens, especially the poor and those with limited political influence, have not been central to the development/environment debate. New forms of governance are needed to more adequately deal with water pollution and allow all voices to be heard.

At present pollution control and environmental enforcement is spread across a number of central and local authorities. In the absence of effective treatment technologies, the use of which is poorly enforced, the 'polluter pays' principle is seldom applied. Even where penalties exist they are a muted 10 or 20,000 baht fine (USD240-480), making it cheaper to pay fines than to install and run pollution-control technology. Even if technology were to adequately keep pace with demand the Pollution Control Department (PCD) has noted that wastewater plants in themselves will not solve the problem of pollution without a change in the sources, or behaviour, of pollution (PCD, 2001:8).

There are not enough human resources for effective regulation and monitoring of pollution or pollution sources and departments involved in environmental management often have limited power or influence. In addition, environmental regulation and monitoring are rarely effective in terms of institutional coordination or spatial reach. In the case of the BMR effective planning and management of the urban area and its hinterland would have to address an urban environment spread over

hundreds of kilometres and involve dozens of authorities. However, as Sham has noted 'the institutional and legal structures of local governments in many developing countries of South-East Asia are generally not equipped for such purposes' (Sham, 1993:355).

While the government is often seen as the most important actor in the environment debate, in the case of Thailand it has often appeared detached or disinterested in environmental debates (especially those which are critical of or seek to check patterns of economic policy). Even where government has attempted to address pollution its resources are overwhelmed by the scale of the problem. Approximately 7m baht per year was spent on pollution management activities through the 1990s, accounting for a mere 0.3%-1.2% of the country's expenditure (PCD, 2001:65). The annual budget for water pollution management was significantly higher (4 or 5 times) than other pollution controls (at about 67%), though even the PCD admit that 'the solving of pollution problems has not been as successful as was anticipated' (PCD, 2001:66). The recent shift towards the building of large waste treatment plants (WTPs), while important, is unlikely to significantly address problems of water pollution representing just another government attempt to deliver a solution. One estimate has suggested that even if all six WTPs that are planned for the BMR come into operation than they would only deal with 40% of solid waste treatment. Only new factories have modern treatment systems (at source) in place. Older factories may have no system at all – nor be required to install one. Even then, it has been widely acknowledged that factories, in order to save money, regularly shut down treatment systems overnight.

Arguably, the State will never have enough WTPs, financial capital and human resources to deal with the problem, and government spending on such needs is decreasing if anything. One answer is to build the capacity of State agencies. While this is an important response, building state capacity is 'difficult, time consuming, and expensive' (O'Rourke, 2004:10). Even when capacities are built environmental agencies rarely exercise as much power as Ministries which promote foreign investment, industrialisation or other politically more relevant outcomes. In Vietnam, as elsewhere in Asia, 'the state and in particular local environmental agencies, even when they have training and equipment, are rarely autonomous or powerful enough to implement tough regulations on industry' (O'Rourke, 2004:10).

At least some government agencies are coming to this conclusion themselves – if only through pragmatism rather than an ideological shift towards sustainable development. The Pollution Control Department in Thailand has recently argued for greater community involvement as 'more focussed and less costly options are much more preferable, compared with the capital intensive options previously chosen' (PCD, 2001:66).

However, such an inclusive response requires more than simply passing over responsibility to communities. It requires a shift toward a greater and more meaningful form of democracy and participation. In Thailand, as in Asia, it is often the poor and informal settlements which are portrayed as the enemy of the environment. From this position, governments resist extending services and infrastructure to settlements which are deemed to be 'illegal' on the shaky assertion that they do not see a future for such settlements – an act which simply reinforces marginality and subordination. Yet Furedy (1992), and others, have shown that the

poor, as scavengers and recyclers, account for most of the solid waste management of ASEAN cities:

in many instances it is the poor who actually are the de facto caretakers of the environment through the types of jobs generated by environmental disregard on the part of the affluent. Whether it is street cleaning for the government, rag picking for large-scale paper makers, or scavenging for materials to use for their own housing construction, much of the economy of the poor is derived from improving environmental conditions in the cities (ESCAP 1993:5-4).

The regulatory 'command-and-control' approach based on fixed standards has not worked in the rapidly growing cities of Asia and this is unlikely to change. As the United Nations has noted 'the rigidity of this approach and the expense, both administrative and financial, of carrying it out doom it to at best partial implementation, even in industrialized countries' (ESCAP, 1993:5-39). Such a conclusion is important given the continuing demographic transition of the region, and the lessons of these failures need to be heeded in countries where urban growth continues to accelerate. There is a need then to reconceptualise both the problem and search for more viable solutions. As ESCAP has argued:

The problem, therefore, is not one of how to "control" or get rid of the poor, but is more importantly one of how to provide positive support to them both in terms of heightening access to environmental resources and improving their efforts to cope with the environmental conditions of their households and communities (ESCAP 1993:5-4).

It is to these efforts then that we now turn.

Alternative approaches

Two recent initiatives indicate some movement towards alternative forms of governance in Thailand which should be of interest to policymakers, donors and civil society throughout the region. Whether these reflect a significant shift towards creating sustainable communities and effectively address the issue of water pollution is inconclusive to date. However they do represent more political space as well as greater opportunities for decentralised governance through the empowerment of communities. Firstly I will outline recent policy initiatives in Thailand and their initial impact. Following this I then outline the experiences of one urban poor klong community in Bangkok. This example demonstrates the opportunities available to organised communities but also the significant challenges that still confront them. How far such innovations will go though towards the full empowerment of communities and addressing the sources and causes of pollution remains to be seen. Some early conclusions are then drawn.

CODI and the UCEA Programme

In recent years Thailand has experimented with a decentralised approach to urban poor communities and their environments. While such initiatives remain exceptions to

the macro policies of private sector led industrialisation they do indicate avenues which are available to both States and civil society.

A key agency in the moves toward more holistic and community-based actions around the environment is CODI, the Community Organizations Development Institute (CODI). CODI, in essence, acts as a forum between local government, government departments, the municipality and the poor. It was initiated by the Thai government in 1992 to more effectively support community organisations with small loans for upgrading but has since evolved into an important instigator of community development and a 'meeting ground' between the State and the urban/rural poor (see CODI, 2003a).

CODI's initial foray into water pollution and urban informal settlements was through the UCEA (Urban Community Environment Activities) project, which ran from 1996-2002. With funding from DANCED (Danish Cooperation for Environment and Development), communities were organised to identify needs and encouraged to take greater control over their environment and development (see Boonyabancha, 1999). Through small loans of a few thousand US dollars CODI supported hundreds of poor communities to become involved in identifying environmental threats, develop low-cost community-driven responses to these needs, and organise themselves into viable collectives to manage funds and projects and network with other communities facing similar challenges. This often acted as a catalyst for canal cleaning projects and in some cases involved communities to 'scale-up' their actions to focus on tenure, livelihoods and wider recognition over their rights and existence. As an example, one community along Klong Hualampung in Bangkok repainted the community, created an easement for safer access to and around the community, and cleaned the canal. This involved five-six communities along the Klong working together for the first time.

In themselves these moves may not avoid resettlement but they have created more aware communities and opened the channels of communication with government agencies, as well as NGOs. These communities have also sought to network around the common identity and challenge of being klong communities. For a number of years a 'canal network' has existed throughout Thailand, which has involved klong communities meeting one another, sharing experiences and developing common strategies to both improve their environments and resist eviction. Known as the 'Liveable City' project, klong communities were encouraged to develop community plans and initiatives and share these with other communities, through CODI facilitation.

There were, and are, of course obstacles to success. Though the UCEA was supported by the government and funded through an international donor this did not guarantee a change in government attitudes towards klong communities or the environment (Ribeiro and Srisuwan, 2005). Secondly, while communities were encouraged to understand their roles and participate, many initiatives folded over time as initial energies waned and more immediate issues demanded their time. This especially has been the case with security of tenure.

Baan Mankong

The UCEA 'experiment' in community organising and planning has been somewhat superseded by a much larger and arguably more radical initiative known as the Baan Mankong (secure housing) project. Baan Mankong was initiated by the Thai government in 2003. It also is being facilitated through CODI and is aimed at channelling funds directly into poor communities to bring about improved shelter, living standards and more secure tenure (CODI, 2003b; Boonyabancha, 2005).

While ostensibly a housing project Baan Mankong has arguably shifted the nature of the State-urban poor relationship quite significantly. Through the programme communities will be given access to money to develop community infrastructure, they will have access to soft loans and will be able to use grants to employ people to work with the community, such as architects, engineers etc. The system then is potentially radical in terms of empowering communities, as it encourages the development of communities through organising, identifying needs, and addressing priorities. It goes beyond the physical need for adequate housing and seeks to empower poor communities vis-à-vis other communities and the State, not through conflict, but through coordination. Eventually these local-level initiatives are intended to form the basis for city plans. The scale of the initiative is vast, having as a target improved tenure security for '300,000 households 2,000 poor communities in 200 Thai cities within five years', a figure which represents half of all urban poor communities in Thailand (Boonyabancha, 2005:25).

Arguably then, these twin approaches, from UCEA to Baan Mankong should provide both the impetus and the space for poorer communities to consolidate themselves and to develop into more sustainable communities. Though Baan Mankong is still in its early days these issues and questions will be further explored through a case study of one klong community in Bangkok which evolved through UCEA and is now involved in the Bann Mankong programme.

Klong Sawan, Langsit

Klong Sawan, 'the place to construct the boats', is a small community of 50 houses (approximately 250 residents) in Northern Bangkok. The community has been on its present site for 15-20 years. Tenure is precarious, with multiple owners of the land they live on. Originally most people settled on a field adjoining the klong which was owned by a bank. But they were shifted off the land in 1998 for condominium development – though the field has stood vacant since the financial crash of 1997/98. The community was then forced to move next to the klong and now most houses are built on stilts over the canal. To stop the community moving back on the land, walls were erected around the rim of the canal which has meant that the community occupies a very narrow stretch on the water bank.

As a result of this marginal existence the klong became the only available source of water but also waste disposal, including sewerage. As pollution worsened the community 'turned their backs on the klong' with living spaces facing away from the often stagnant and polluted waterway. The spur for community response came from the threat of eviction – from the irrigation department (which is responsible for the

canal's banks) and from adjoining private landowners. The community then sought help through CODI and the UCEA programme.

The community's initial focus was in establishing a formal organisation and developing a community saving programme. This was to offset the threat of homelessness and provide some cash for community initiatives. There are now 60 members in the savings group. In a matter of a few years the community has saved 70,000 baht (USD1,700) in a general account, which people can draw from (It was most recently used to build a community centre and for environmental initiatives) and 130,360 baht (USD3,200) in a housing account, which can only be used if the community is relocated. Savings were also driven by a desire to access seed funding from CODI for further community development. Though the community can never afford to purchase the land they live on, they do wish to offer enough compensation to landowners to give them more leverage to stay. As part of the Baan Mankong programme the community has begun to invest in housing, and even used the services of student architects to design a community re-blocking blueprint which identifies houses to be repaired, upgraded or re-built. Though it is unlikely that formal land ownership will ever eventuate (the cost of land is prohibitive) the municipality has told them it will allow them to stay for '50 or 60 years' and that they can be granted 'semi-legal status'.

Environmental initiatives were among the first projects tackled by the community as they were seen as a visible sign of a strong community which could live sustainably beside the klong. These included the establishment of a waste segregation and recycling centre, cleaning the klong of solid waste and 'treating' the canal with a molasses mix to re-oxygenate the water. The community has also, through listening and learning from the experiences of other canal communities, developed a grey water treatment system using basic technology and also a treatment process for faecal waste. Posters have been drawn showing how best to recycle.

Despite this level of activity the community received little in the way of recognition. Invitations for local authorities or government to attend 'demonstration fairs', organised to illustrate the environmental initiatives of the community, were only moderately attended. At one meeting, in which the community outlined its environmental programmes and activities as well as its intentions to build a more attractive community 'they made no comment and went away without saying anything. We haven't heard anything since'. For some this has led to a feeling that little is being achieved. This has sometimes led to community frustration, 'why us do it all', when they see the markets and factories and shopping malls openly polluting the water. However, even though they know it is a token effort it is an important first step. As one respondent stated:

The government always says to us 'you are dirty – look at what you have done to the klong'. But now we can see 'look at what we are doing – look what we have done'.

The klong Sarwan community is demonstration of the energy and resources people will invest into their communities given a greater sense of permanence and an opportunity to shape their communities. Far from being unsustainable, in a few short years Khlong Sarwan has developed a significant savings account; a basic sewerage

and grey water system to deal with wastewater; an environmental programme; has dredged and cleaned the canal; and established a recycling centre. The condition of the canal has improved appreciably and as a result people feel that they have created a sustainable riverside community.

However it is clearly evident that such initiatives and resources were only devoted to the canal once a greater sense of security eventuated. The community dedicated time and resources to environmental issues so long as such action was an investment to the greater end of security. In fact, the two went hand in hand: community actions to deal with water pollution and solid waste was in response to a greater sense of security, but environmental activities were also employed as leverage to this end. As such, the environment has provided an opportunity for the community to enter into negotiations with authorities over a range of unmet needs. Tackling water pollution has consequently provided opportunities for new relationships to form and alternative possibilities to develop and be debated. It has also provided the stimulation for community organising and a greater sense of control over people's lives. It should be noted though that such enterprise is only sustained as long as it leads to dialogue around needs that include, but also transcend, the environment and that in the absence of this democratic space it is less likely that marginal communities would sustain environmental activities. Arguably it is likely to be the success of the Baan Mankong programme which is key to sustaining the environmental and mobilising initiatives begun under the UCEA.

Conclusions: sustaining an alternative future

In megacities such as Bangkok, it is unlikely that any single authority or community can effectively manage the environment through traditional top-down structures and procedures. Urban development is so dynamic that no one authority determines outcomes. Urban development plans and grand designs suppose a far more orderly set of actors and relationships than actually exist. What is clear is that there is little real and sustained interaction between government and communities. Even those programmes or strategies that do exist are not integrated in any effective and sustained way. In short there is a crisis in the governance of large cities and a clear case that such a crisis is leading to unsustainable urban regions. While such a case can and often is made, this 'crisis' also offers opportunities of sorts for what Braganza has referred to as 'place-based and bottom-up initiatives'. The case study of Klong Sarwan demonstrates that when space and opportunity allow, communities can play a much greater and more positive role in environmental management in partnership with the State and other communities.

However there are several caveats to any approach that romanticises the role of communities in creating alternative and sustainable cities. Communities will only engage in dealing with, for example, water pollution, when and if this acts as an opportunity for negotiation over other (perhaps more important) unmet needs. What is clear is that communities which face repression and hostility rarely will use their precious time to engage in environmental initiatives or, as one respondent put it, 'clean up someone else's mess for them'. One reason for community reticence to engage with environmental issues is that 'they perceive or have experienced that such efforts either do not bear fruit or are beyond their capacity to influence ... many

actions are dependent upon complimentary ones taken by outside actors. If, for example, the city government is unable to pick up trash from community collection points on a regular basis, the incentive to bring trash to those points is severely diminished' (Douglass 1995:17). The urban poor will mobilise around the environment when it brings rewards which transcend the environment. In this sense the environment is a surrogate, a tool, but this can have positive outcomes if opportunities are there.

There are simply not the resources in government to bring about improved environmental conditions without more effective partnerships with civil society. State actions and activities are highly fragmented, poorly resourced and often not sustained past initial implementation. If government is not solely capable then it needs to support other actors. However, granting a greater role for communities is inherently a political act. Though communities may provide examples of autonomous sustainable actions in 'the form of community environmental management initiatives designed to pursue 'sustainable development' independent of state control and direction' (Bryant and Parnwell, 1996:13) success is not guaranteed until there is adequate support for such alternatives. In contrast to Klong Sarwan, improvements made in other klong communities in cities through the UCEA programme are already falling into disrepair, precisely because authorities were reluctant to engage in further action. Even then, when communities seek to scale-up questions about who pollutes waterways and what government is doing to curb the pollution of, e.g. factories, authorities show little interest, and instead reply 'but you are illegal – you should keep quiet, be careful what you say, keep your mouth shut'.

What is clear though is that urban poor communities in Thailand are demonstrating a greater capacity to mobilise around their environment. This can either be the basis for partnership or conflict. The environmental initiatives urban poor communities participate in are assertions of citizenship. But governments may be reluctant to accede to such causes given the relative power of other interest groups - 'the politics of sustainable development is becoming intertwined in a much broader process of political, economic and social change in South-East Asia' (Bryant and Parnwell, 1996:13). Thailand's ECEA and Baan Mankong programmes do offer an alternative vision. However if truly sustainable outcomes are to emerge, from beyond the klong, there will also need to be a complimentary shift towards a deepening of democratic processes at the national level.

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