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# **Spaces of Engagement and Contested Territories of the Tonle Sap**

by

**Mak Sithirith<sup>1</sup> and Carl Grundy-Warr<sup>2</sup>**

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<sup>1</sup> Mak Sithirith is a PhD candidate, Department of Geography, National University of Singapore, and with the Fisheries Action Coalition Team (FACT).

<sup>2</sup> Carl Grundy-Warr teaches political geography and natural resource politics with the Department of Geography, National University of Singapore.

## Abstract

The Tonle Sap is a hotly contested space. Yet the precise spatiality and conflicts over space are not fully appreciated or understood by many agencies addressing issues of environmental and resource management in the Lake. We argue that political geographic issues are extremely relevant to the analysis of livelihoods, resources and governance practices. We outline some of the territorial issues relating to the Lake, floodplains and wetlands (particularly in relation to what we identify as “floating villages”, “stand-stilt villages” and “farming-cum-fishing villages”). In addition, empowerment for communities can only be achieved through the construction of multi-scale “spaces of engagement” involving community-based, non-governmental, intra- and trans-national forms of dialogue, involvement and action.

This paper discusses the issues related to the Lake’s territorialized resources. In particular, we examine how the State has effectively constructed specific territories and “scales” affecting fishing activity. We focus on the contested fishing territories around the Lake and struggles of small fishing communities to build their own spaces in order to protect livelihood resources. The paper starts with an introduction to certain bio-physical characteristics of the Tonle Sap, followed by an introduction to key concepts, an analysis of the contested political space, and finally we move onto to ideas relating to community and NGO “spaces of engagement”.

### 1. Socio-economic significance of fisheries and livelihood security

Before children learn to walk they paddle on the Tonle Sap. Many children are already experienced fishers before they reach puberty. The Lake is of critical value for its common pool resources, as a fishery for ordinary people sharing the lake, floodplain and wetlands zones. In fact, the Tonle Sap Lake is reportedly one of the most productive inland fisheries in the world. The rich fisheries resources have turned the lake into economic and social importance for the nation and Cambodian people, and helped to make the Tonle Sap and floodplains a highly contested space.

An estimated three million people live in five provinces around the Lake, of which about 1.2 million people are in the floodplain, 25 percent of whom are living in “floating villages”. Virtually all of these people are involved in fishing as their prime occupation or to supplement their livelihoods. Tonle Sap fisheries contribute about 60 percent of Cambodian total inland fisheries production (Baran, 2005) or between 200,000 to 218,000 tonnes (based on 2001-2003 data) (Department of Fisheries, 2004). The value of the Cambodia inland fisheries catch per year has been estimated at around US \$150 to \$200 million (van Zalinge, *et.al.*, 2000). Nevertheless, we should be cautious about fisheries production data in Cambodia due to notorious under-reporting of catches in the commercial sector and relatively limited data from the family fishers (Touch Seang Tana and Todd, 2003).

Fisheries, alongside other aquatic flora and fauna, and wetlands products are socio-economically vital “common property resources” for a virtually every household in the Tonle Sap floodplain. However, we should note that variations in livelihood opportunities, capacity, adaptability, resilience and vulnerability to environmental changes exist between and within villages of the floodplain. As Hap Navy *et.al.* (2006: 5) observe: “The majority of households in the Tonle Sap lake may be referred to as ‘fishing-dependent’, although the degree of dependency varies between village types (e.g., fishing, fishing cum farming, farming) and due to their locations or proximity to the waters.” Relative resource dependency though does not simply relate to proximity and primary occupations (fishing or farming) but also to seasonal and periodic events that alter reliance upon specific resources (Hap Navy *et.al.*, 2006). In a study of the socio-economic

dynamics of small-scale inland fisheries, Hap Navy and Bhattarai (2006) also found there to be big seasonal variations in returns for households from fishing, with open season fishing providing as much as four times more “real profit” than closed season fishing. Farming-cum-fishing villages may be more highly dependent on fish resources in bad harvest years, whereas “floating villages” have an all-year-round dependency on fishing and fish related activities (Rab *et.al.*, 2005). It is clear that fishery management in the Tonle Sap is a multi-pronged socio-economic, livelihood and sustainability issue. It is equally clear that efforts aimed towards enhancing the “ground up sustainability” of the fisheries are essential to the task of improving livelihood security for a large number of people whose daily lives are associated with the lake, floodplain and wetlands ecosystem.



## 2. Physical and hydrological dynamics and the significance of the “flood pulse”

The hydrology of the Tonle Sap Lake comes from three sources; the reverse flow from Mekong River via Tonle Sap River, the tributaries around the Lake and the rainfall. The hydrological phenomenon of the Great Lake Tonle Sap is a unique one. The reverse flow of water from the Mekong to the Tonle Sap Lake provides 45,000 million cubic meter (mcm) and from the Tonle Sap tributaries provide 24,000 mcm and the rainfalls or the precipitation 14,000 mcm (Matsui *et al.*, 2005).

The Mekong River at Kratie, about 180 km from Phnom Penh, provides an average annual flow of 440,000 mcm/years. Of this, about 51,500 mcm/year enter the Tonle Sap Lake (CNMC and

NEDECO, 1998,<sup>3</sup> Cross, 2005). The water entering into the Tonle Sap Lake from the Mekong River in the wet season is estimated at 13-20%<sup>4</sup> of the wet season flow in the Mekong (CNMC and NEDECO, 1998; ADB, FAO and DoF, 2003). The water coming from the Mekong River joining with water from the tributaries of the Tonle Sap Lake store in the Tonle Sap Lake, estimating at 1.3 billion cubic meters in dry season and 50 billion cubic meter in wet season. Of this volume, it is estimated that 62% of the water in the Tonle Sap originates from the Mekong River and 38% from the Tonle Sap tributaries.

The wet season starts in May. At the start of the wet season in late May, the Mekong water flows up into the Tonle Sap Lake through the Tonle Sap River at Phnom Penh due to the rise of water level in the Mekong as result of heavy rain and snow melting in highland Tibet in China--this phenomena is called the "**reverse flow**". The rise of Mekong water level in rainy season (May to September) has contributed to the increased inflow of water into the Tonle Sap Lake (CNMC and NEDECO, 1997)<sup>5</sup>. The lake volume at the highest water level around late October reaches 40-80,000 mcm (Sopharith, 1998). The depth of the lake is estimated at about 8-11 m above the sea level (asl).

The dry season starts from November to April. In the dry season (November to April), the water in the Tonle Sap Lake drain back the water from the Tonle Sap Lake via Tonle Sap River to Phnom Penh and from there to the sea. This happens due to the drop of water level in the Mekong River, creating the Lake a unique ecosystem on earth.

The monsoon rainfall in the catchments of the surrounding area and the rainwater collected in the Mekong cause the rise in water levels and subsequent flooding. The flood water "reverses" from Mekong River to the Tonle Sap Lake via Tonle Sap River. The flood reaches the Tonle Sap Lake and waters rise in the inundated forests, swamps and scrublands around the Tonle Sap Lake. The level and duration of the floods are essential as they determine the wetlands area that and thereby the amount of terrestrial primary products that can contribute to aquatic productivity.

The productivity of the ecosystem is generally attributed to two of its particular characteristics: the flood cycle and the vegetation of the floodplain usually described as the flood or flooded forest. Fish dispersals and migrations are key components in the lives of fish-dependent communities in the Lower Mekong (Baird et al., 2000; Bardach, 1959; Hubble, 1999; Roberts and Warren, 1994; Roberts and Baird, 1995; Shiraishi, 1970). Migrations are related to the "flood pulse" and so-called "reverse flow" of Mekong flood-waters during the June-October monsoon season causing a greater volume of water to "push" up the Tonle Sap river into the lake. Consequently, the Tonle Sap swells and expands in spatial extent from a dry season area of permanent lake of approximately 2,500 km<sup>2</sup> increasing to as much as 15,000 km<sup>2</sup> in the wet season (MRC, 2003). The inflow of water carries with it millions of juvenile fish, fish eggs and fry into to the lake, carried by the strong current and swept into the floodplain areas as they are inundated. The nutrient rich floodplain provides excellent "rainy season nurseries" for fish (Bartham and de Brito Ribeiro, 1991; Hogan *et.al.*, 2004) where fish are able to gorge on leaves, fruits, earthworms, insects, aquatic invertebrates (shrimps, crabs, mollusks) and other fish

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<sup>3</sup> Cross, H. 2005. A report on likely infrastructure developments on the Mekong floodplain in Cambodia and their significance in changing flow pattern. Mekong River Commission (MRC) and Ecosphere Solutions Pty Ltd, Draft May 2005.

<sup>4</sup> The report of CNMC and NEDECO (1998) estimates that with a reverse flow of about 50,000 mcm/year, this represents 13% of the Mekong flow. The ADB, FAO and DoF (2003) report indicates that about 20% of Mekong flow enters the Tonle Sap Lake in wet season.

<sup>5</sup> CNMC and NEDECO, 1997. Natural Resources-Based Development Strategy for the Tonle Sap Area, Cambodia: Final Inception Report, MRCS/UNDP, October 1997, Phnom Penh, Cambodia.

(Hubble, 1999). Thus, biodiversity in the lake is intimately connected with the Mekong hydrological system (Campbell, 2006).

The annual “flood pulse” are like “heartbeats” for the Mekong system (Poulsen, 2003). Unusually low or high water-levels in any particular season mean that communities living in the floodplain and on the lake itself have to make sudden adaptations, and their ability to quickly adapt livelihood patterns according to altered circumstances is a critical dimension of human resilience and security when times are tough (Marschke and Berkes, 2006). Fishing methods designed for the rise and fall of the seasonal flood waters are numerous. The water level usually varies from 1–2 m amsl during the dry season to 8–11 m amsl during the wet season and therefore, the fishing gear is developed to match water depth conditions in both seasons (ADB, 2002). Fish and fishers live according to the cyclical changes, as Poulsen (2003: 8) observes: “Most species [of fish] have evolved complex life cycles to take full advantage of the flood pulse, including elaborate migration patterns, high fecundity and strong dispersal ability ... Fishers of the Mekong often have detailed knowledge about the timing and sequence of species migrating as the water rises and falls, allowing them to use the most appropriate fishing gear at any time. Their lives – and the livelihoods of fishing communities – are also in tune with the flood pulse.”

### **3. Contested political space of the Tonle Sap**

It is important to recognize that the Tonle Sap space is complex, not only due to having a varied physical landscape, ecology and micro-habitats (Asian Development Bank, 2003; Campbell et al., 2006; CNMC / Nedeco, 1998; Touch Seang Tana, 2002) but also relating to the political, economic, administrative and environmental divisions and zones affecting natural resource management. There are numerous ways in which the Tonle Sap area is territorialized and affected fishery practices, for as Peluso (2005: 6) has stressed: “territorialization produces places *in relation to* claimants”. Within the Tonle Sap there numerous confusions over claimant rights and responsibilities. In addition there exist problems of over-lapping claims, multi-functions (often with contradictions between fishery and conservation goals) in the same zones, boundary disputes between “commercial”, “middle-scale” and “family fishers”, and great ambiguity over the specific territorial and resource access rights afforded to different communities (even those within the same communities). Furthermore, the broad provincial level administrative divisions between the five littoral provinces of Kampong Chhang, Pursat, Battambang, Seam Reap and Kampong Thom adds to the territorial governance complexity. These provincial divisions produce jurisdictional, institutional and management issues affecting the politics of resources and politics of scale in the lake system. For instance, some provincial authorities and fisheries departments may be more active than others in enforcing fishery laws, enforcing boundaries, conservation management and in protecting community rights.

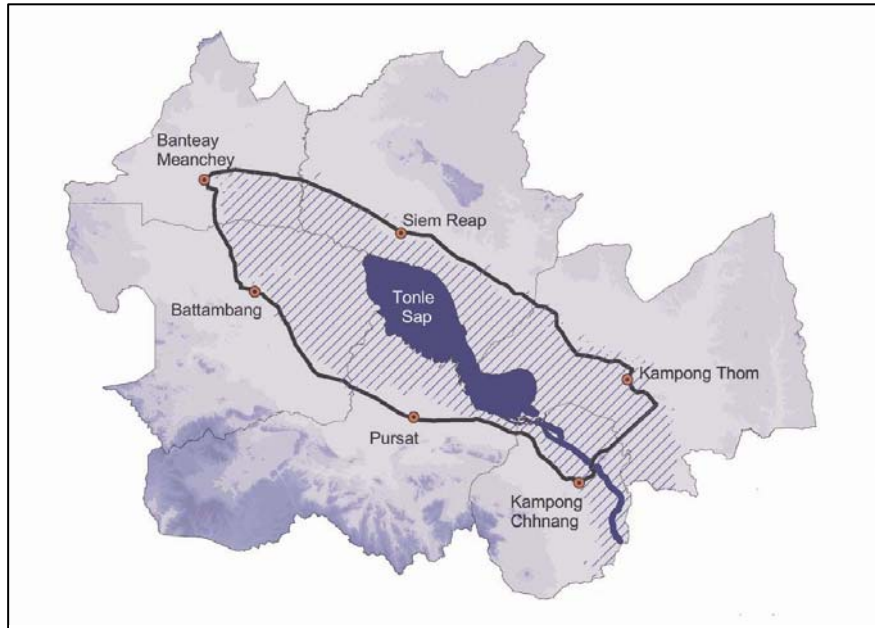


Figure 2-1: Administrative boundaries of Tonle Sap, adopted from Keskinen (2003)

A broad *functional geographical classification* of key areas in the Tonle Sap that directly impinge on fisheries management would need to incorporate three basic areas – the *commercial fishing zones* (under a private lot system); the *public fishing areas* (these are zones open to what are designated as “middle-scale” and “family fishers” (discussion later), which vary in size according to season, being greater in extent during the “closed season” (that is closed to the commercial fisheries, during the rainy season, June – September); and the *conservation areas* and designated fish sanctuaries supposedly under state control. The “commercial fishing zone” is a zone which is rich in fisheries and other resources. This zone is further classified into many smaller zones known as a “commercial fishing lots”, in which each fishing lot is delimited by a defined boundary and territory. The fishing lot is commercially auctioned for “private control”, although the controlling agents should really be regarded as “cessionaires” or “lessees”, not as “owners” (Tana and Todd, 2002). Only powerful and rich people having connections in government are involved in an auction process. Those who win the auction have an exclusive right to those commercial areas over 2 to 4 years period. The “public fishing zone” or the “public fishing area” is located outside the commercial fishing lot and conservation areas. The boundaries of this zone are marked not by the areas themselves, but by the extent and boundaries of the commercial fishing lot areas and the conservation areas. In other words, the public zone has no specific zonal boundaries and also the physical boundaries of this area vary throughout the year due to the fluctuations of water level in the lake. However, access to this area is considered in many aspects to be “open access”, although fishing in the “public fishing area” is only allowed for “small scale” and “medium scale” fishing only, which are legally classified “scales” based on the use of specific fishing gears. Commercial fishing activity is not allowed in this area. We argue that ambiguities in the temporal, legal and actual size of territories, contests over numerous boundaries, and uncertainties over “scales” of fishing are adding to the problems of lake mismanagement. Territorial conflicts are also restricting the potential for enhancing community forms of management and co-management in the lake and the floodplains.

Conservation spaces also throw up problematic management issues. After a Royal Decree on Protected Areas in 1993, followed by a decision in October 1997 by UNESCO to designate some



70,837 ha in three areas, which were finally confirmed in 2001 (Prek Toal, Boeung Tonle Chmar and Stun Sen) as Biosphere Reserve Areas. These areas are also divided into sub-zones of “core areas” surrounded by “buffer zones” and beyond that “transitional zones” (Bunhoeur and Lane, 2002; Campbell et al., 2006). The conservation areas are supposed to be “to preserve flooded forest, fish, wildlife, hydrological systems and natural beauty”, but in practice there are problems due to the allowance of fishing concessions in the “buffer zones”, and also due to the fact that there are other multiple uses in and around flooded forests (dry season rice, mung bean cropping, vegetable gardens, and so on). Thus conflicts between stakeholders and competition over resources within designated conservation areas are quite common. In the lake proper, overlaps between the Biosphere Reserve Areas and commercial fishing operations also produce conflicts (Bunhoeur and Lane, 2002). Several state agencies are involved in management. The fishing lot areas are managed by the Department of Fisheries under the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Biosphere Reserve is supposedly managed through an inter-ministerial Tonle Sap Biosphere Reserve Secretariat which includes representatives from the Ministry of Environment (MoE), MAFF, and Ministry of Water Resources and Meteorology (Campbell et al., 2006). However, the latter does not seem to prevent confusion over functional uses, conflicts between stakeholders, and poor coordination over planning priorities.

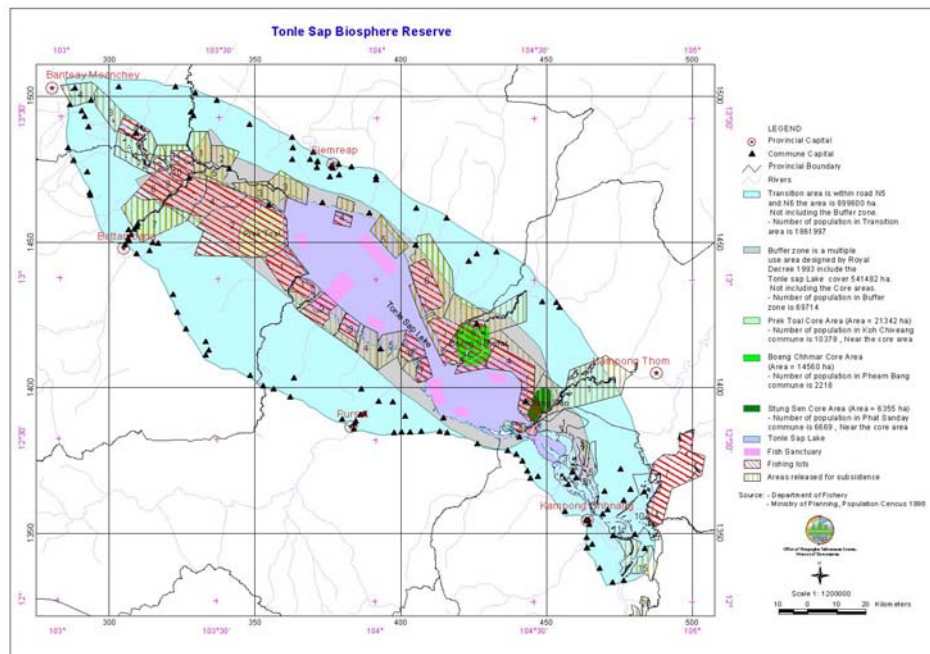


Figure 2-2: Biosphere Reserve in Tonle Sap

Different competent agencies (international organizations, NGOs, state agencies, community-based bodies) also tend to have different ways of perceiving the space and resources of the Tonle Sap. Firstly, state planners and policy-makers have tended to develop, since the French Protectorate period, a rather “abstract” functional and commercial view of space that has prioritized the value of the private fishing operators over other fishers and to manage fishery space as revenue-generating lots (Tana and Todd, 2002). Of course, this has been tempered by the more recent management concern generated by the creation of Biosphere Reserves (Bunhoeur and Lane, 2002), and fishery reforms introduced in 2001 that seek to extend community resource management areas by some 540,000 ha (Ratner, 2006). Secondly, scientific studies by ichthyologists, fishery managers, ecologists, hydrologists, modeling experts, wetlands specialists,



and so on, have tended to emphasize the fact that there are no definite “borders” for flora and fauna, migratory fishes, and between different ecological niches (Baran and Cain, 2001; Campbell et al., 2006; Hubble, 1999; Torrell et al., 2004). In spite of the inherent contradictions that rigid administrative boundaries can create, the value of having sanctuaries and protection zones has been promoted by several scientific researchers and concerned environmental organizations, such as the World Wildlife Fund, World Fish Center, UNESCO, and IUCN to name a few. Thirdly, a broad range of NGOs and international donor organizations have been lobbying for communities to be given enhanced rights, roles and responsibilities in the Tonle Sap area (including groups such as the Fisheries Action Coalition Team (FACT); Oxfam’s Mekong projects; and the Asian Forestry Network, AFN, to name a few). All forms of “community-based property resource management” (CBPRM) necessarily implicate space and involve tenure, property, access to resources issues, as well as territorial claims, identities, representation and practices (Ostrom, 1990; Peluso, 2005; Vandergeest and Peluso, 1995). As Peluso (2005: 8) succinctly put it: “Today’s politics of the commons has become a territorial politics.” Recognition of the territoriality that is now integral to many battles over and for communal spaces is important, although not all organizations perceive “commons” or “common spaces” the same way, and there are often different perspectives even between organizations with shared “common” interests.

#### **4. Politics of scale and “spaces of engagement”**

Numerous papers have informed our ideas regarding space, politics of scale, and the development of potentially transformative spaces of engagement. In particular, we would like to highlight just the most significant of these, and briefly relate their ideas to the Tonle Sap, before launching into a more detailed grounded discussion of key issues. Firstly, we acknowledge the analytical work of several writers who have examined multiple dimensions of scale, cross-scale and multi-scale politics in the Mekong Basin. Such as Hirsch and Wyatt (2004) examining issues of Se San Protection Network up-scaling in the social and environmental politics relating to the upstream Yali Dams in Vietnam and downstream impacts mostly felt in Ratanakiri province in Cambodia. We take from this the importance of creating new scales of engagement through community-based linkages with NGO networks in developing awareness and actions well beyond the specific places being most adversely affected by the dams. Lebel, Garden and Imamura (2005) have provided an excellent schema that links the politics of *scale* with the politics of *position* and *place* throughout the Mekong Basin. We find this analytical schema useful when just considering the complex space of the Tonle Sap. As noted above, there are numerous territorializations, territorial practices, perspectives, representations and so on, and there are many political issues relating to resources which cut across the territorial ones, creating complex politics of scale. Our research also indicates that the precise position of different settlements in the lake system affects their territorial and non-territorial politics with neighbouring settlements. We discuss this briefly below with reference to “floating villages”, “stand-stilt villages”, and farming-cum-fishing villages. And politics of place is significant because some settlements have concentrations of wealth, resources and political patronage in relative abundance compared to other places around the lake system. Indeed, some “floating villages” are still fighting for recognition on the political map of Cambodia!



Picture 1: Floating village in Kampong Loung, Pursat



Picture 2: Stand-stilt village in Kampong Phluk, Siem Reap



Picture 3: Stand-stilt village in Kampong Phluk, Siem Reap. This picture is taken in the dry season, but in the wet season, the village is submerged in the water.



Picture 4: Chong Kneas villages and Its Ricefields in Tonle Sap floodplains in Siem Reap Province

Referring to political geographer, Kevin Cox's analyses of politics of scale has helped to inform our understanding of the Lake and its spatial politics. We particularly appreciate the interlinked concepts of "spaces of dependence" and "spaces of engagement" (Cox, 1998). The former are "localized social relations" based upon the protection of "essential interests" for which there are "no substitutes elsewhere". In a sense, this concept touches nicely on the notion of "common property resources" for such resources cannot be easily substituted by those communities utilizing them and dependent upon them for their livelihoods (Olstrom, 1990). In the context of the Tonle Sap, we view "spaces of dependence" as being analogous to those public fishing areas now being allocated for forms of community management and co-management. Spaces of dependence are

defined as those spaces that provide vital resources in support of livelihoods. These are the fisheries, resources of the inundated forests and wetland zones, and for farmer-cum-fishing communities, the rice paddies, pools, ponds and surrounding lands. The spaces of dependence for fishing communities in the Tonle Sap have been shrinking due to the invasion from other actors such as commercial fishing lot owners, medium scale fishing operators and illegal fishing operators. Thus, small fisher communities around the Tonle Sap have built their own network known as the "Coalition of Cambodian Fishers" to engage in "dialogue" at within and across scales. We argue that this relates to what Cox (1998) terms as "spaces of engagement". Basically, a space of engagement is one "in which the politics of securing a space of dependence unfolds". This is clearly linked to "relational", "associational" and "networked" forms of power, whereby power is "inherently spatial" but does not conform to particular territories or scales, and is "always constituted in space and time" through social relations (Allen, 2005). Once different groups form networks and alliances "with" other groups around particular issues, then we see that "power with" can be empowering and enabling, allowing actors to jump scales, and sometimes take on, influence or alter forms of "power over", particularly the institutional power of state and other "official" organizations.

Finally, we concur with Richard Howitt's (2003: 143) approach to researching the politics of scale and spaces of engagement as one that should be "an empirically grounded dialectic approach to the investigation of scale issues" (also, Howitt, 1993), as well as his concern for "new geographies of justice" (2003: 145). The Tonle Sap is a socio-economically highly differentiated space with some groups having tremendous access to resources and other groups becoming poorer and more marginalized. Simultaneously, the intensifying contestation over environmental resources, particularly fisheries, is likely to lead to "a tragedy" in terms of degraded environment for all the stakeholders involved. Understanding the nature of the contests and the complexity of the space is critical to developing and strengthening forms of governance that are based more on "power with" the communities most directly affected by changes in the lake system. The rest of our paper is based on some of the empirical work carried out so far, however, we would like to stress that there is much more scope for grounded political geography research in the lake and surrounding floodplains.

## **5. Contested spaces, resources and rights between settlements**

The Tonle Sap is just a complex politically as the semi-enclosed Gulf of Thailand, only that the political geographies of the lake are all "internal" ones involving various stakeholders, and with the added complication that several of the boundaries alter in shape, appear or disappear with the seasons. Illegal fishing, poaching, disputed access rights, disputed boundaries, and conflicts over the utilization of inundated forests all require knowledge of the peculiarities and ambiguities of the lake's political space. In fact, the Tonle Sap exhibits all five types of fishery related conflicts most commonly found in South and Southeast Asia (Salayo, Ahmed, Garces and Viswanathan, 2006). These are: Type 1 conflicts (Who controls the fishery?) between small-scale fishers (community fishers) and large fishing lot owners and medium-scale fishers over rights of access; Type 2 conflicts (How are the fisheries controlled?) between different fishers in relation to enforcement or lack of enforcement of rules, and between fishers and fishery officials, local authorities, illegal fishers over poor governance; Type 3 conflicts (Relations between fishery users, scale of fishing, ethnic issues) involving fishers using different gears and between communities, encroachers and poachers into public fishing spaces; Type 4 conflicts (between fishers and other users of aquatic resources) are particularly seen between farmers who move into the Tonle Sap to supplement their incomes and those communities residing beside or within the lake waters; Type 5 conflicts (concerning fishery and non-fishery institutional and legal mechanisms) are on-going as fishery and resource management laws and mechanisms are

evolving, being tested, negotiated and in some cases, contested by different stakeholders. For the purposes of illustrating how and why numerous conflicts implicate current spatial arrangements in and around the Tonle Sap area, we shall examine four categories of interests characterized by their geographical relation to fisheries. Whilst we are aware that within each of these categories there exist variations on a theme, social and economic differentiation within them, we also identify specific types of conflict that relate to each of these groups.

### ***Farming-Fishing Communities***

Fish are important for food security, supplementary incomes and livelihood security, especially when off-farm income opportunities may be restricted (Degen and Thouk, 1998; Hori *et.al.*, 2006). Rain-fed lowland farming communities are located around the lake between the upland forests and floodplain (wetlands and flooded forests), relying on farming as a primary occupation, but with fishing as a critical component of livelihood strategies (CFDS, 2001; Navy, Leang and Chuenpagdee, 2006). From 2003-4 survey data of 270 households in Kampong Chhnang and Siem Reap provinces, almost households in fishing villages (“floating” and “raised” villages) and around 66 percent of fishing cum farming households fished all year round (Rab *et.al.*, 2005). Even villages considered to be mostly farming (not always an easy distinction to make in Cambodia) reported that almost half their households fished during the “closed season”, when the flood-water is high and there is less farming activity (*Ibid.*; Navy *et.al.*, 2006). In fact, research by Rab *et.al.* (2005) found that fishing villages typically sell most of their fish as fresh fish, processing some of it, and utilizing a relatively small proportion for home consumption, whereas the percentage of fish catch used for home consumption is higher for farming villages than in fishing and fishing cum farming villages. It also needs to be stressed that “floating communities” have no land and so cannot produce rice, and so the degrees of “fishing-dependence” will vary according to settlement type and available livelihood alternatives. Poorer fishing households have to sell fish to buy rice and other essential foodstuffs, and they are often indebted, so the mere act of selling fish does not necessarily indicate they are operating at a commercial “scale” such as the “middle scale” and “private lot” fishers. However, it is clear that a great many communities in Cambodia fall within the category of “farming – fishing”. This is not only true of the Tonle Sap area, but in other parts of the country where fishing in paddies, small ponds and access to wetlands is often a critical element in household livelihood management. Access to aquatic resources is vital on a year-to-year basis, particularly for communities faced with stresses such as periodic droughts, rice-shortages, and limited off-farm opportunities (IUCN, 2005).

Inevitably, within the floodplain there are occasional conflicts between different users. Farmer-fishers are often viewed by the stand-stilt and floating communities nearer or within the lake as potential poachers transgressing into *their* community spaces, which in any case are not necessarily clearly defined and may not be officially recognized by the provincial and national authorities. Boundaries within inundated forests are complicated by the rise and fall of flood-waters and are often contested by neighbouring communities. As fishing space is highly competitive, the influx of more distant farmer-fishers may be perceived as an intrusion by local communities within the lake. As the latter also have problems of access to landed resources and as their rights of access within flooded forests may also be unclear, then environmental resources everywhere in the Tonle Sap tend to be jealously guarded and disputes are common.

Hori *et.al.* (2006) examined the significance of fishing to farmer-fisher communities of Srey Rangit and Svay Ear in Chamnakroun commune, Stoung district of Kompong Thom province. These villages are some distance from the lake waters and are engaged in rice-growing and other forms of agriculture. Even so, the researchers found that they are highly dependent on fishing as a supplement to their livelihoods. Some people fish inside the lake in both the “open” and “closed”

seasons, others fish mainly in the flooded forests during the wet season, and virtually all villagers use small gears to catch fish, toads, shrimps and other aquatic creatures in the paddies around their villages. As other studies have shown (Ahmed *et.al.*, 1998; Rab *et.al.*, 2005; Navy *et.al.* 2006) have shown, village vulnerability to harvest failure, limited off-farm jobs, the constant need for cash, and the traditional reliance of fisheries, all make fishing integral to livelihood strategies and to household economies. Hori *et.al.* (2006: 853) warned against strong prohibitions preventing farmer-fishers from having access to fisheries as they argue this would only tend to encourage illegal, unregulated and unreported fishing.

The high significance of fishing to the rural economy of ordinary villages suggests that resource management should be as integrative as possible, incorporating both fishing and farming into long-term planning and policy measures. Nevertheless, a precautionary approach is necessary due to the demographics of wetlands and floodplains, which may simply mean too many fishers chasing too few fish in future years. We argue that access rights should be clarified for all groups of fishers, with clear “open” and “closed” season arrangements; well-defined (and properly enforced) regulations, particularly in relation to appropriate forms of fishing and gears; greater community-level responsibilities (backed by agreement on boundaries, access rights, and the ability of communities to levy appropriate fees to non-community members wishing to fish or harvest other resources within “agreed” limits); and locally-agreed fish-breeding sanctuaries coupled with stronger protection afforded to known biosphere reserve areas. Without clarified spatial and non-spatial rules of engagement, conflicts will continue between communities primarily engaged in fishing and large numbers of fisher-farmers, who may be more “distant” from the lake but who are still highly dependent on having some access to fisheries.

### ***Stand-Stilt or “Raised” Communities***

Another category of settlements facing a myriad of disputes, some generic to the whole lake and others specific to the bio-physical and living conditions of “raised” communities in the floodplain, often in or near to patches of inundated forest. Stand-stilt villages are not mobile, although some village members may have temporary “floating” homes on the lake, and so they face a season on dry or semi-dry land and a season as raised homes above flood-water. In a sense, the floods produce a sort of vertical spatiality with respect to resource access and utilization being very different in the pronounced seasons, and a vertical political territoriality as regards community-determined but not necessarily officially-endorsed boundaries, which may alter according to the wet or dry season. For instance, fishing zones have a pronounced seasonality, particularly neighbouring fishing-lots, which may try to extend their areas of operations into perceived community zones. Farmer-fisher communities on the fringes of the wetlands and inundated forest zone also make frequent encroachments into the area prone to flooding in search of more land for farming crops such as mung-beans, pumpkins, watermelons and cucumbers (Asia Forest Network, 2004). In addition, there are many instances of poaching for fish, firewood, snakes and other wildlife within inundated forests (Stuart *et.al.*, 2000; FACT, 2001; AFN, 2004).

These communities can engage in a variety of activities relating to the resource-base, including many types of fishing (gillnet, hook and line, traps, bamboo fence nets, spears, “brush park” shelters or *samras*), livestock rearing (crocodiles, fish, pigs, ducks, chickens), collecting water-lilies, fish processing and smoking, boat driving, carpentry work, home gardening during the dry season, and so on.

One “raised” commune that has received both NGO and scholarly attention for its experiments in community management is Kompong Phluk, Prasat Bakong district in Seam Reap province (AFN, 2004; Marschke and Berkes, 2005). This commune actually comprises three villages (Dey

Kraham, Thnot Kambot and Kok Kdol) with around 425 families and 2,800 people recorded during 2004 (AFN, 2004). Kompong Phluk's history of community resource actions date back to resistance against flooded forest clearances for watermelon production in the 1940s, and since then numerous efforts aimed at clearing parts of the flooded forest for farming. In the 1990s, slash and burn activities by in-migrant upland farmers were strongly resisted by the commune members. Since the late 1990s until the present, the commune has sought official recognition for community resource management efforts in the inundated and lake areas used by commune members. Kompong Phluk elected a resource management committee with external backing from the FAO-Seam Reap project and Provincial Department of Fisheries, and the fishery reforms introduced by the Royal Cambodian Government in 2001 have further legitimized such community structures (Department of Fisheries, 2001; AFN, 2004). Thus, in some respects, Kampong Phluk may be viewed as exceptional in terms of its long history of community-based resource interest and the involvement of external bodies in support of community mechanisms. However, numerous lessons may be derived from considering this commune's experiences in the face of numerous external pressures.

Kompong Phluk faces encroachments from a variety of sources, including upland farmers moving down into the resource-rich wetlands, from neighbouring farmer-fisher communities, from private fishing lot operators seeking more space, from long-distance fishers poaching inside community areas, as well as boundary disputes on all sides, including in open waters with the floating town of Chong Khneas nearby. Kompong Phluk's management plan has helped to define areas and regulations within commune zones; determine harvests of forest products; set regulations for appropriate fishing gears, mesh-sizes, and seasonal fishing rules; set fines for prohibited activities ranging from collecting fuel wood without permission, catching wildlife, use of illegal gears, and poaching. The community has organized joint patrol zones and arranged joint patrols with local police; actively networked members of the commune about resource management issues; created small "no fishing" areas; and made concerted efforts to prevent illegal fishing in the "patrol blocks" allocated to the respective villages of the commune (AFN, 2004). In other words, there has been no lack of sophistication in terms of community resource management efforts, proving that fishers can be full participants in resource management, even with limited financial means. As Marschke and Berkes (2005: 32) observe: "Through self-organization and development of common institutions, experimentation, elaboration of knowledge and social learning, unsustainable practices can be made sustainable." Kompong Phluk's efforts in this regard do hold important lessons for other communities, but unless there is stronger legal recognition of community rules and unambiguous rights to manage resources in particular spaces, with proper support from appropriate authorities, then the various fishers and villagers around the lake may be discouraged from participating in such schemes due to past (and ongoing) experience of poor governance.

### ***"Floating" Villages***

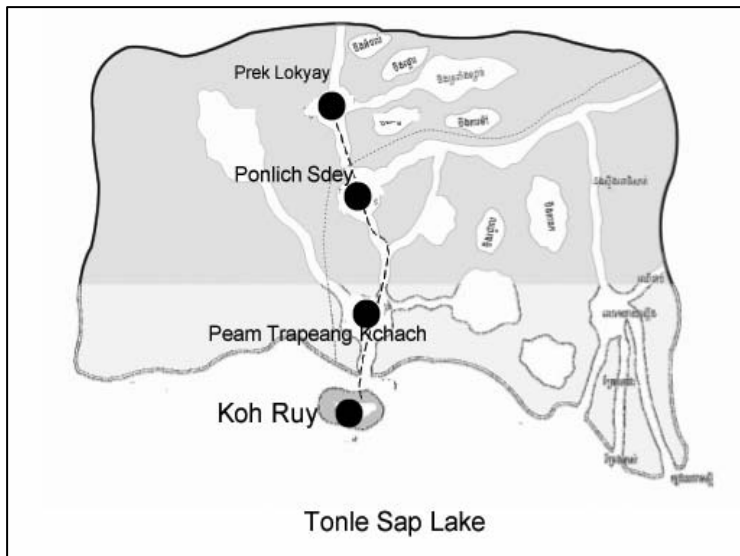
Approximately one-quarter of the inhabitants of the Tonle Sap floodplain actually "float" in semi-fixated (by pillars) "boat-houses" that are not fixed to a particular location all year round. These villages periodically alter their location as flood-waters rise and fall. This is not free-floating, there is a seasonal pattern to it, and each village has preferred sites at different times of the year. One of the key political aspirations of such villages is having their "mobile" territorial rights and village zone borders officially recognized by district, provincial and national authorities. We argue that political territoriality is a central component to on-going struggles for recognition, access to resources, conflicts with other villages and with private fishing lots, and the creating of a sense of unique identity amongst these "floating" communities (based on authors' research visits in 2005 and 2006).



There are many floating villages in Tonle Sap lake, but we take one village as an example known as Anlong Raing, located in Kompong Por Commune, Krakor District, Pursat Province. This village has approximately 93 families and 431 inhabitants.

Each “floating village” has a unique “cycle of movement and settlement” in line with the rising and falling of the lake waters. From July to early March, Anlong Raing is floating on the water, and from late March to late May, villagers settle on an island known as Koh Ruy. From July, the water level rises up, so villagers move their floating houses, and in August, the village reaches the area known as *Peam Trapeang Kchach* and stays there for about a month and then in September the whole village moves up to settle in another area known as Ponlich Sdey. In October, the village stops at the highest point of the stream known as Prek Lokyay and stays there for some

time before starting to move back downstream. In November and December, the whole village returns at Ponlich Sdey. The villagers stay in Ponlich Sdey area until late February, before returning to Koh Ruy Island in mid-March.



Map 5.1 Route of the movement of Anlong Raing village

Partly as a result of such mobility, “floating” villages have acute problems of lack of authority recognition. As a consequence of this, local authorities pay less attention to “floating” village needs, and therefore, service delivery including health, education and other social service provision is often very restricted.

Villagers in Anlong Raing completely depend on merely fishing, and none of them own farms or land. Fishing is absolutely essential as part of their subsistence and livelihood security (Sithirith, Honey & Rainsey, 2005). The fishing gear utilized by the community varies from location to location, from month to month and villagers’ special knowledge about each location influences their fishing techniques. The Royal Government of Cambodia’s release of numerous areas from private lots to community areas at least provided Anlong Raing with greater space for fishing. At present, about 1,587ha belongs to this village, of which inundated forest covers 572 ha and open water area covers 1,015 ha. Even so, this does not mean that Anlong Raing is a fully and legally recognized as a “village”. At the level of the community these areas were realized and then mapped with community boundaries (Anlong Raing Community Fisheries by-Law, 2002; CFDS, 2002, Sithirith, Honey & Rainsey, 2005). Later these were disputed by the provincial fisheries office and were subsequently re-delimited with a great reduction of community areas. Thus, Anlong Raing community leaders were in disagreement with the new boundaries set by the authorities (CFDS, 2002). Simultaneously, there have been ongoing disputes involving nearby

rain-fed rice growing communities further in from the lake, again with unclear borders and access rights relating to the nearby areas of inundated forest.

Land Classification	area
areas under Inundated forest	572
area under water	1,015
Total	1587

Source: Statute of Anlong Raing Community Fishery, August 20, 2003

The community is also in conflict with the fishing lot No.7 in Pursat Province over a boundary. Indeed, during one of our research visits the villagers complained about the commercial lot placing fine-mesh along its bamboo “boundary” meaning that even small fishes

could not penetrate, which adversely affected the fishing in the community zone (Sithirith and Grundy-Warr, fieldwork, July 2006).

The fishing technique is limited to subsistence, but the main problem is that subsistence is not survival and this is an internal conflict of the community fisheries. Within the village, some villagers are not registered to be a member of the community fisheries, and still they fish within the areas (about 70% of villagers are members), using fishing gears differently. On the other hand, fishers from outside enter to fish inside the community fisheries regardless the community fisheries and the fishing gear restriction. Some other commercial medium scale fishers encroach into the community fisheries areas with the commercial fishing gears, making the conflict uncontrolled.

The conflict and the decline in fisheries, villagers are exhausted to protect the resources. In 2004-05, villagers find alternatives through farming on the lands in the dry season within the floodplain areas, but face rejection by government as the village is not recognized as a village, land title on the floodplain is not permitted and the scare that farming in floodplain could lead to the use of chemical inputs (CFDS, 2002; Sithirith, Honey and Rainsey, 2005).

We can easily see from the case of Anlong Raing that the Tonle Sap is a hotly contested politicized space. This village moves throughout the year from one location to another, and at each location, fishing practices vary according to bio-physical conditions and water-level. This village has set up a community fishery, but recognition of community zones is disputed partly due to the mobile nature of this “floating” village. In fact, there are significant problems in getting this village recognized officially, and on the map. Since space is uncertain, the community faces conflicts with commercial users and with nearby “settled” communities in the farming-cum-fishing zone. Thus, such floating communities cannot fully participate in the management of resources in the Tonle Sap.

## 6. Fishing “scale” categories in the Tonle Sap

Scale is applied in fisheries in Tonle Sap. There are three politically and legally defined “scales”: the *commercial fishing scale*; *medium scale* and *small scale* (often termed “family fishers”). Each fishing scale is categorized according to the geographical differences (productive and less productive areas, large and small areas; the use of the fishing gears (fishing gears for commercial exploitation; fishing gears for small scale fisheries) and the capacity to pay the tax. The state has formulated policies affecting fisheries access, the utilization of the resources and the allowable gears for each zone. There is also temporal differentiation between small scale, medium scale, and commercial scale and classified as close (May-October) and open fishing (October-May) seasons. Medium scale and commercial fishing operation carries fishing operation only in the

open fishing season starting from October to May. The small scale fishing operation fish year round both in close and open fishing season.

We perceive the officially designated fishing “scales” as highly problematic in empirical terms. Our research has found that numerous fishers choose to cross-scales by up-grading and up-scaling fishing gears and practices, which has the *de facto* effect of intensifying fishing activity, as well as introducing some “illegal” and damaging practices into many areas, such as the use of electro-fishing gear, mosquito net fishing, poison fishing, and so on (Grundy-Warr and Sithirith, forthcoming paper). Thus, there is often a gap between the official designation of “scale” and what is actually happening in the fisheries.

In addition, there are numerous boundary conflicts commercial fishing areas, the conservation zones and so-called “public fishing areas” as defined on official maps. The territoriality in the Tonle Sap is similar to the way described by Sack (1986), Delaney (2005), Storey (2004), Vandergeest (1996) and Vandergeest and Peluso (1995) in other contexts as an attempt of the state to control people and resources by delimiting and asserting control over the commercial, public and conservation areas. Power is exerted over individuals through control of those in a specific territory or through excluding people from the territory. However, there are problems of commercial lessees exerting their control by extending designated areas into “public fishing areas”, of encroachments by “illegal fishers” in different zones, and positional boundary disputes over the precise delimitation of fishing zones.

The commercial fishing lot operators receive 2-4 years exclusive rights and the fishing lots will be put a new round of auction. The fishing lots operators often maximize the fish catch in order to generate enough returns so that they will have enough reserve funds to secure the next round of auction. As fish catch is declined, these efforts lead to an over-exploitation of fisheries resources and some times expansion of fishing boundaries to include the public fishing areas which often lead to violent conflicts with other user groups. Small-“scale” fishers also conflict with medium “scale” fishers over access to the public fishing areas. Such conflicts are understandable in contexts when fishing is critical to livelihood security and there is often an absence of proper administration, problems of official corruption, and no proper enforcement of regulations relating to designated zones. The ambiguity over precise spatial delimitations only serves to enhance opportunities for “illegal” fishing, encroachments and conflict. Sadly, the poorer fishers and most marginalized fishing communities are the ones most adversely affected by the obvious power asymmetries within the Lake system, by poor governance and spatial disorder.

## **7. (Re) constructing “spaces of dependence” and creating “spaces of engagement”**

What can small and poor fishermen do in situation like this? How can small and poor fishing communities build their political space across different scales and levels (local, district, national, Mekong Basin)? In the Tonle Sap, the State is actively (re)constructing the fishing and resource management scales. According to Marson (2000), as noted by Jones *et al.* (2004), the "state routinely constructs scales, as it creates and restructures local government institutions as it formulates and implements policies and as it decide which issues are appropriately dealt with at which scale" (Jones *et al.*, 2004:103). We believe that small and poor fishermen in Tonle Sap Lake do not stay quietly, but they do resort to actions at local, provincial, national and regional levels. Simultaneously, the scales of political action are actively being (re)constructed by community and family fishers, as well as through their involvement with non-governmental organizations. Indeed, recent years have witnessed increased community mobilization of smaller-scale fishing representatives through their neighborhood communities and an evolving but still relatively under-developed Tonle Sap community network (FACT, 2005). Thus, fishers are

effectively seeking to defend their “spaces of dependence” through the creation of effective “spaces of engagement” and associational forms of political action (after Cox, 1998).

One of the clearest illustrations of how local fishing communities are constructing their own political scales of action in the Tonle Sap was reported by the Fisheries Action Coalition Team (FACT) and Environmental Justice Foundation (EJF). The report entitled *"Feast or Famine--A Solution to Fisheries Conflicts"* provides a background about fishers’ struggles against the commercial fishing lots in 2000. Fishers around the Tonle Sap protested against the commercial fishing lot operators’ expansion of fishing areas into the public fishing areas, limiting access of small fisher-folk to marginal fishing areas for their livelihoods. The mass protest led to the decision by Prime Minister Hun Sen in October 2001 to release 56% of commercial fishing lots areas for local communities for the entire country. This State-led decision effectively expanded the potential "spaces of dependence" for local communities around the Tonle through the reduction in the spaces awarded to commercial fishing lots from 507,731 ha in 2000 to 271,139 ha in 2001 in Tonle Sap Lake (see Table 6.1).

Table 6.1: Changes in area of fishing lots in Tonle Sap Lake

Province	Fishing lot area in 1919* (ha)	Fishing lot area in 1940** (ha)	Fishing lot area from 1998 to 2000*** (ha)	Fishing area in 2001**** (ha)
Kampong Chhnang	67,667	63,037	62,256	45,084
Kampong Thom	248,272	192,571	127,126	69,353
Siem Reap			83,941	22,725
Pursat	105		55,120	24,848
Bantey Meanchey	182,352	189,362	332,756	6,411
Battambang			146,532	102,718
Total Tonle Sap Lake	603,880 (42.09%)	444,970 (46.7%)	507,731 (53.23%)	271,139 (64.21%)
Total Cambodia	1,434,710	952,039	953,740	422,216

Source: \* Degen et al., citing 1919 Maps from National Archives  
 \*\* Degen et al., citing Cheyvy and Le Poulain 1940  
 \*\*\*Sub-decrees DoF, January 2001.

In the Tonle Sap, about 47% of the total commercial fishing lot areas were released from commercial fishing lot areas in 2001 for local communities. The number of fishing lots have been reduced from 56 in 2000 to 38 in 2001 (18 fishing lots have been deleted). However, the remaining fishing lot areas are potentially the most productive fishing grounds in terms of fish yield and fish habitat. Perhaps not so surprisingly, the “new” areas for communities tend to be less productive fisheries. The details of fishing lots released from each province is detailed in Table 6.2

Table 6.2: The reduction of fishing lot area in 2001 for local people uses

Province	Fishing area in 2000		Fishing lot areas in 2001		Net reduction in lot area (%)
	No. of lots	Lot area (ha)	No. of lots	Lot area (ha)	
Bantey Meanchey	4	32,756	2	6,398	80.5
Battambang	12	146,532	9	102,718	29.9
Kampong Chhnang	19	62,256	12	45,085	27.6
Kampong Thom	7	127,126	7	69,353	45.5

Pursat	7	55,120	5	24,848	54.9
Siem Reap	7	83,941	3	22,725	72.9
Total	56	507731	38	271,127	46.60

Source: DoF, 2001. Sub-decrees of the fishing lot released for local people uses

The official changes in the potential "spaces of dependence" for fishing communities and reduced fishing lot areas has greatly affected the management of the Lake as a whole. We list the temporal scale of changes in Table 6.3 and show how the change in "spaces of dependence" affect the management of fishing lots in the Tonle Sap Lake in three different periods; before 1997, between 1997 and 2000 and after 2001.

Table 6.3: Change in management system of the fishing lot in the Tonle Sap

Fishing lots	Before 1997	Between 1998 and 2000	After 2001
Fishing lot number	57	No. of fishing lot 56	38 fishing lots
Auctioned fishing lots	All fishing lots were an auctioned fishing.	49 were auctioned fishing lots	3 fishing lots are bidding lot
Research fishing lot	No research lot	7 fishing lots were research fishing lots, given to private owners without bidding	35 fishing lots are research fishing lots.
Period of ownership	2 years	a) 2 years for auctioned fishing lots, b) four years for research fishing lots.	a) 2 years for auctioned fishing lots; b) six years for research fishing lot
Fishing season	Only in the open fishing season : - 1 <sup>st</sup> October to 31 May for the fishing grounds located north of Phnom Penh - 1 <sup>st</sup> November to 30 June for the fishing grounds located south of Phnom Penh		

The "research fishing lots" were established in between 1998 and 2000, whilst the management system of the fishing lots was designed into the auctioned fishing lots and research fishing lots. There were 49 auctioned fishing and 7 research fishing lots, covered 507,731 ha in the Tonle Sap during this period (1998-2000). The auction fishing lots follow the same system as before 1997, in which the owner of the fishing lots born out of the public bidding process. Although the research fishing lots were officially designed as "scientific research lots", in fact they were given to private individuals who were well-aligned with key State officials. As these lots are awarded without bidding, the research fishing lots became a most contentious political issue in the Tonle Sap as they are obviously open to corruption. After 2001, there were important changes in the numbers of fishing lots. Some 38 fishing lots remain as "official" fishing lots, of which 35 fishing lots were converted into the "research fishing lots" whilst three remained as an "auctioned" fishing lots. At the same time, the research fishing lot concession period was extended from 4 years to 6 years. Due to the extended period of concessions there is in effect a reduced national budget generated from fisheries in the Tonle Sap.

Thus there are mixed outcomes of the fishery reforms, reduced areas for commercial lots and potential increases in "spaces of dependence" in the Tonle Sap. We can argue that ordinary fishers' political struggle in 2000 has led to increased "spaces of dependence", although this struggle did not create a true "space of engagement" for fishers. Several observers have shown

that there is still plenty of scope for improved communication and relations between the Community Fisheries Development Office of the Department of Fisheries and the newly formed community resource management committees at local level (Middleton and Raingsey, 2005); and noted that State approaches to “community resource management” are still top-down with a general lack of resources being devoted to encouraging truly co- and community-led forms of management (Sithirith and Middleton, 2005). Ratner (2006: 81-2) also observed that: “the legal framework to support community-based fisheries management is still largely absent and the necessary institutional transformations has just begun.” In spite of these clear political, legal and administrative limitations, the outcome of the fishers’ struggles is extraordinary, increasing the “spaces of dependence” which are now institutionalized by the State as “community fisheries”.

The community fisheries are established on the basis of one Sub-law known by many local fishers as a “Sub-decree” on Community Fisheries. In this Sub-decree, the “spaces of dependence” in the form of community fisheries are regulated, for instance, through the use of specific fishing gears to fish in the so-called space of community fisheries subject to subsistence but not commercial operations. Thus, the spaces of community fisheries are bounded by Department of Fisheries-constructed boundaries of exclusion and inclusion of members and non-members.

In Tonle Sap by 2003, some 96 community fisheries were established, representing the “new scale” or “community scale” in Tonle Sap (see Table 6.4). This scale is linked to the government fixed-scale system such communal, district, provincial and national level.

Table 6.4: The number of Community fisheries by province

<b>Province</b>	<b>No of Community Fisheries</b>
Siem Reap	10
Kompong Thom	10
Battambang	18
Pursat	14
Kompong Chhnang	44
Total =	96

Source: DoF, 2003

As our discussion of the different settlement and community types earlier indicated, there continues to be many problems in terms of official recognition of some communities on the map, boundary disputes, and problems of ambiguity in terms of community members’ rights and responsibilities. Whilst the situation has improved with the fishery reforms, for now at least there is official recognition of “community-based resource management” and potentially increased “spaces of dependence”, the sorts of problems outlined earlier for “floating”, “stand-stilt” and “farming-cum-fishing” communities continue to stifle efforts to manage resources due to on-going conflicts. In practice, we argue that the “spaces of dependence” of poorer fishing communities have still to be realized in terms of actual control and management of resources.

## **8. Discussion**

The Government decision to increase “spaces of dependence” came two years before the commune election in 2002. Directly or indirectly, the Prime Minister’s party (Cambodian People Party) won the majority of the votes, especially in Tonle Sap area. This fishery reform came as surprise to many NGOs since it did not take any long-term plan for the Lake as a whole. The reforms without a master plan were believed to be politically motivated potentially dangerous for

fisheries management. On the other hand, the “spaces of dependence” released from commercial fishing lot areas for local communities were mostly the less productive ones, leaving the productive fishing areas under the control of commercial operators. In other words, the commercial fishing lots cut from the fishing lots were the cheapest, valued less than 30 million Riel (US\$1=4,000 riel) (FACT, 2001<sup>6</sup>; NGO statements<sup>7</sup> for Consultative Group Meeting, 2003 and 2004).

The community fisheries that were newly established have been nominally listed but many of them do not exist in practice, and if they do, many are dysfunctional. After the reforms, some of the areas released ostensibly for local communities were “captured” by powerful and rich people, while many “family scale” fishers were disadvantaged (Oxfam UK, 2003).

The fight to make community spaces continues in the Tonle Sap as it does in other parts of Cambodia (Thoun and Vannara, 2005; Baird, 2006). Fishing communities around the Lake have begun to build up their own network known as the "Coalition of Cambodian Fishers (CCF)". This is a social network of small and poor fishers established to build their political “space of engagement”. The construction of scale relating to both “spaces of dependence” and “spaces of engagement” is an ongoing process. However, much still depends on the overall governance structure, still heavily influenced by State policy, upon foreign donor supports for civil society, and on the degrees to which NGOs are able to coordinate actions and work with community-based agencies.

The construction of “spaces of engagement” at the “national scale” is being facilitated by NGO coalitions such as the "Fisheries Action Coalition Team (FACT)". Whilst FACT is a national NGO it operates through building networks and alliances with other NGOs, donor agencies and government agencies at national and (Mekong) regional levels. At the national level, FACT works closely with Ministry of Environment with a mandate seeking sustainable long-term resource management and the protection of natural resources, which is similar to FACT’s goals for community-based forms of management. However, many practical problems confronting communities still can not be effectively resolved through this process, and some of the problems extend beyond the “national scale” (such as broader hydrological and environmental changes due to broader anthropogenic actions within the Mekong Basin as a whole). Thus, in addition to efforts aimed at strengthening community “spaces of engagement” within Cambodia, FACT and other NGOs are seeking to develop broader transnational “negotiating space” (Hirsch and Wyatt, 2004), with efforts to link the “politics of scale”, “places” and “positions” of fishing communities (Lebel, Garden and Imamura, 2005) within Cambodia and across borders.

Hitherto, the actual “spaces of engagement” for civil society participation in environmental management in the Tonle Sap remain limited. The communities around the Tonle Sap are still not well-organized and for most communities there are low degrees of participation. NGOs and international organizations are working to enhance the community “spaces of engagement”. At the same time, the State (re)constructs spaces at local, district, provincial and national levels. To date, the participation of local people within officially designated and jurisdictionally defined “scales” is low and actions at such levels is driven by government institutions responsible for sector-based management but coordination among these institutions is often poor.

It is important for local people to build their “spaces of engagement” through connections with both official and non-governmental agents. NGOs and international organizations should support

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<sup>6</sup> FACT, 2001. Feast or Famine: Solution to fisheries conflict in Cambodia.

<sup>7</sup> NGO Forum on Cambodia .2004 NGO statement for donor consultative group meetings



people to build their own spaces in order for them to independently engage in lobbying and acting to protect their livelihood security and manage resources for future generations.

[Reference to add]

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