



Comité technique



LIBERTÉ • ÉGALITÉ • FRATERNITÉ
RÉPUBLIQUE FRANÇAISE

MINISTÈRE
DE L'EUROPE ET DES
AFFAIRES ÉTRANGÈRES

RÉGARDS SUR LE FONCIER n°6

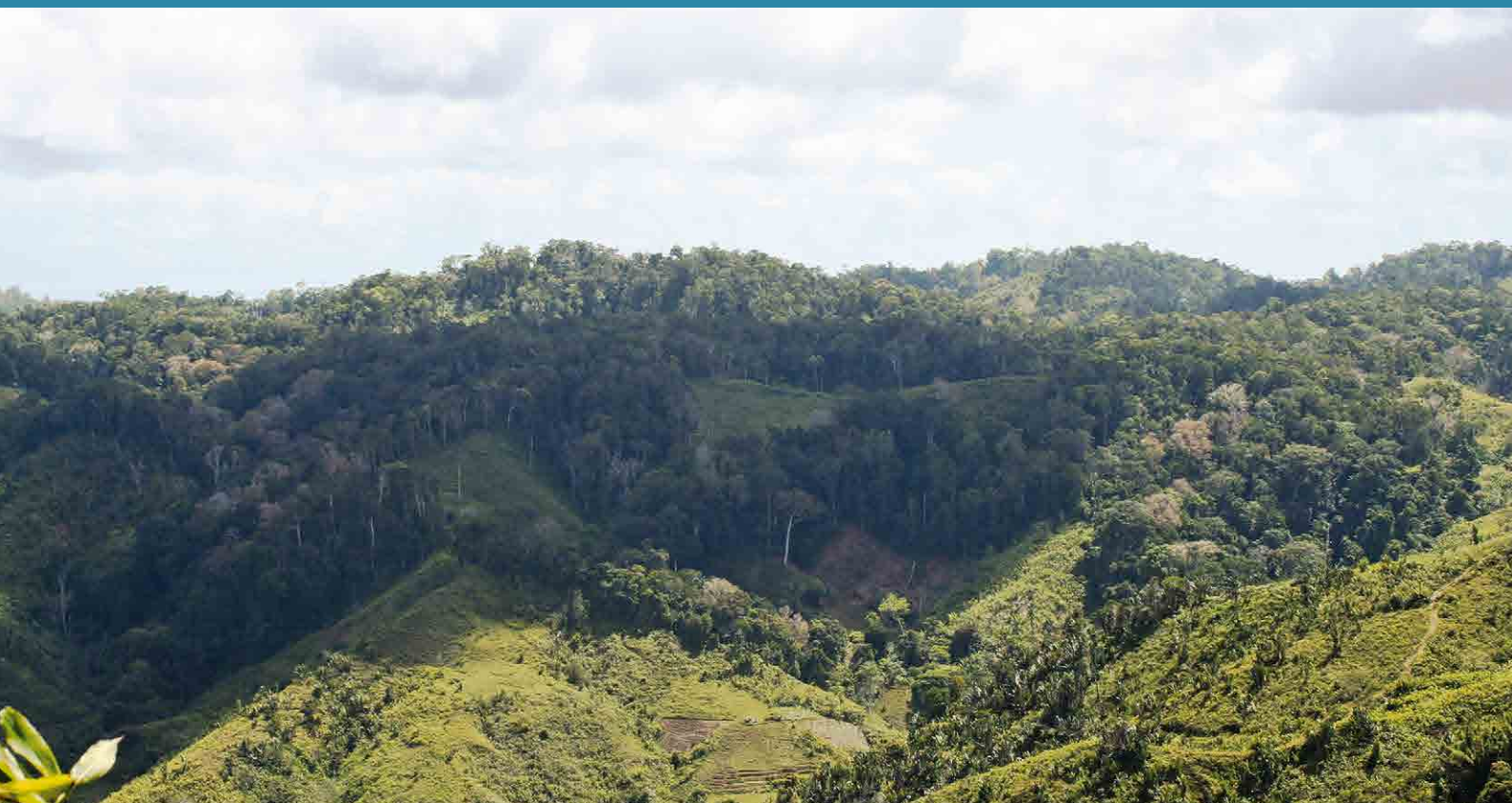
L'approche par les communs de la terre et des ressources qu'elle porte

Illustration par six études de cas

Contributions aux journées d'études de juillet 2018

Sigrid Aubert, Patrick D'Aquino, François Bousquet, Martine Antona, Camilla Toulmin (dir.)

OCTOBRE 2019



Whose commons? A political ecology perspective on fisheries co-management in the Tonle Sap flood plain¹

Jean-Christophe DIEPART, Marie MELLAC and Il OEUR

Introduction

The Tonle Sap wetland is located at the heart of Cambodia. Its unique flood pulse system and annual flow reversal creates an area of high biodiversity and productivity (Arias, Cochrane and Elliot, 2014), which are conspicuous in the fish catches and the large number of livelihoods that are sustained. It is one of the most intensive inland capture fisheries in the world (Baran, Jantunen and Chong, 2007). In Cambodia, the fisheries sector provides income and livelihoods to 46% of the total population - about 6.7 million people - and represents over 8% of GDP (Royal Government of Cambodia, 2015).

The resources and social practices of small-scale fisher folk who live in this rich social-ecological system are best described as 'commons', *sensu* Bollier (2014). They consist of fisheries resources shared by a large number of actors, mostly small-scale fishers, who enjoy access rights and duties that are managed under a governance structure.

But the Tonle Sap wetland is a highly fragmented social-ecological system (Jones and Sok, 2015). In fact, the commons crafted by small-scale fisher folk have long co-existed with large-scale commercial fishing lots (concessions) embedded in authoritarian state formation processes. Operations in these fishing lots had been ecologically destructive and have resulted in a substantial number of conflicts (Degen, Van Acker, van Zalinge, Nao and Ly, 2000). As part of the fisheries reforms initiated in 2000, the government has reduced the size of fishing lots. In a parallel process, it created Community Fisheries (CFIs), which are co-management schemes wherein the responsibilities and rights of fisheries management are shared by the Fisheries Administration (FiA) and family-scale fishing folk.

In this contribution, we aim to situate the emergence of Community Fisheries in the political economic context of Cambodia and, against that background, understand to what extent the Community Fisheries arrangements enable practices of '*commoning*' (Bollier, 2014) in the Tonle Sap flood plain. We explore these issues through a multi-scale analytical framework. We first present the endogenous logics of Tonle Sap flood plain management by small-scale fishing folk, briefly trace the historical context against which Community Fisheries have emerged in Cambodia and examine the rules and governance structure laid down in CFI arrangements. We then look at one particular Community Fishery scheme (Andoung Trach in Battambang province) to critically examine the challenges small-scale fishers face on the ground and how they respond to them.

¹ This text is part of a project on the 'Commons' initiated by the French Technical Committee on Land Tenure and Development and coordinated by CIRAD. The text has been submitted for publication in a special issue of '*Regards Sur le Foncier*'

The endogenous logics of the commons

Viewed from the perspective of local households, the flood plain has a continually changing land use pattern consisting of rain-fed rice cultivation, grassland, shrub land and forest where a variety of non-timber forest products can be collected. This diversity of land uses is actively maintained through a range of practices (fire, plowing, fallow, grazing...) that allow people to access a variety of resources that are of crucial importance to their livelihoods (Diepart, 2010; Roberts, 2015). Fishing in the recession ponds or in open water is part and parcel of this multi-functional management.

The system is rational. The different rice cropping systems are adapted to varying water depths and encompass important aquatic biodiversity (Balzer and Balzer, 2002). The grass is crucial as fodder for the cattle that make a considerable contribution to the household income portfolio. Shrubs and forests are also important for household energy supply (i.e. firewood). Fish and aquatic resources are the second largest food source for Cambodians (after rice) and the major contributor of animal protein intake (IFReDI, 2013). The flood plain is central in the labor management of households as it provides productive occupation throughout the year, which is particularly important during the dry season (Diepart, 2010). The multi-functional management of the plain makes economic sense as well. If compared, the value-added generated by all the activities of the plain is usually more important than those generated with competing forms of land use (such as large-scale rice production) (Evans and Prak, 2008). The small-scale fisher households are multi-active and engaged in a portfolio of farm, off-farm and non-farm activities. In fact, fishing is part of livelihood diversification strategies essentially marked by seasonal and demographic cycles. Small-scale fishing meets both self-subsistence and commercial ends.

Most fisher folk live at the edge of the floodplain but an additional, significant number of seasonal migrants come from outside to fish. Fisher folk tend to use ponds and other fishing grounds that are distributed along paths crossing the plain towards the lake. As such, administrative boundaries make little sense to them.

Fishing is mostly a family-based activity but fisher folk tend to form clusters around fishing grounds, which imply reciprocal ties and trust. Even so, there is no easily defined community-based organization that coordinates fishing efforts or benefit-sharing mechanisms among fisher folk (Diepart 2010). The social cohesion rests on the discipline of each individual who defines her/his place in a hierarchical and ordered network of relations based on the rules of kinship and patronage customs² (Luco, 1997).

Political economy of large-scale fishing in Cambodia and the emergence of Community Fisheries

The fishing lots system was a formal arrangement that has framed large-scale commercial fishing activities in Cambodia since the end of nineteenth century. It was introduced during the French protectorate and has been managed through centralized leasing of fishing rights. It was conceived as a concession model wherein the State leases fishing grounds based on management plans submitted by private entrepreneurs and against payment of royalties to the national budget. For a long time, the owners of fishing lots gained substantial power in

² We define patronage custom after Scott (1977) as a dyadic ties involving a largely instrumental friendship in which an individual of higher socioeconomic status (patron) uses his own influence and resources to provide protection or benefits, or both, for a person of lower status (client) who, for his part, reciprocates by offering general support and assistance, including personal services to the patron

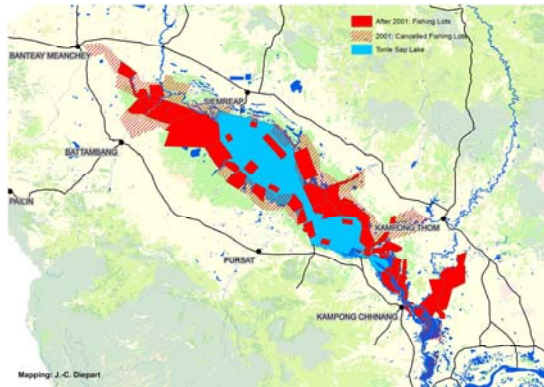
fishing lots management usually through collusion with State agents and tacit support from powerful figures (Sok, 2014; Thol and Sato, 2015). The fishing lots system was the central element of fisheries management until the founding of Democratic Kampuchea (the Khmer Rouge regime) when it was abolished. It resurfaced in the `80s, and from the `90s onwards it became an instrument of political and economic domination by the ruling party, much like the forest or agro-industrial concessions.

As of early 2000, the total area covered by fishing lots in the six provinces around the Tonle Sap lake was 5,178 km² (see Map 1). The lease system worked through a succession of sub-lease contracts so that the area delineated as one lot was actually operated by a range of sub-lessees – under high military control – and often stretched far beyond the lot boundaries. Fishing lots were enforced only from October to May (the so called `open season`) and became available to small-scale fisher folk during the rest of the year.

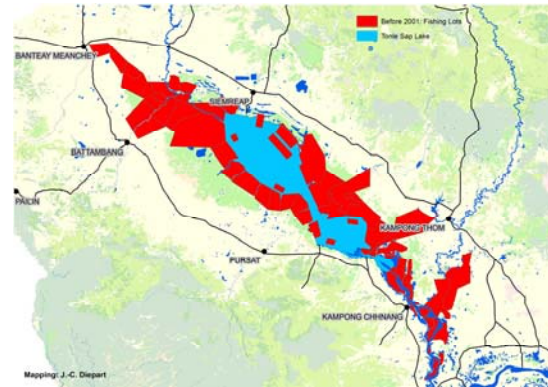
After being reinstated in the early `80s, fishing lot management had disastrous consequences for the fishery sector: degradation of fish habitats (destruction of flooded forest); illegal fishing resulting in sharp fish stock decline (Degen and Nao, 2000); very low return to the national budget due to corruption and a huge number of violent conflicts with family-scale fisher folk that have not met with an appropriate response (FACT, 2001). In late 2000, the Prime Minister Hun Sen declared that Cambodian fisheries management was in a state of `anarchy` and initiated ambitious reforms to restructure the whole sector.

Through the reform, 50% of the fishing lot area was cancelled (see Map 2). In areas released from fishing lots, the new fisheries administration established Community Fisheries. Community Fisheries are a co-management arrangement wherein responsibilities and rights over fisheries management are co-produced by a community of users and the provincial Fisheries Administration. The creation of CFIs received keen support from many donors and development agencies. Within a short space of time, a significant number of CFIs were established through a blue-print process including registration of users as members of a community, the election of a local management committee, the development of internal regulations and a management plan, and the signing of an area agreement, which formalizes the transfer of management right from the fisheries administration to the local community. By 2011, 178 CFIs had been created around the lake to cover a total area of 4,580 km² (see Map 3).

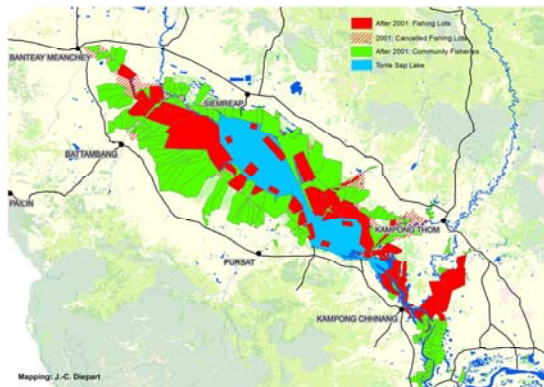
The creation of Community Fisheries was arguably a response to social and economic exclusions that resulted from excessive commodification of the commons. As such it can be understood as a Polanyian counter-movement (Polanyi 1957). Although it was a source of hope for many fishermen and women, the movement was not the result of a mobilization of small-scale fisher folk: it was driven by the State itself and its foreign development agencies.



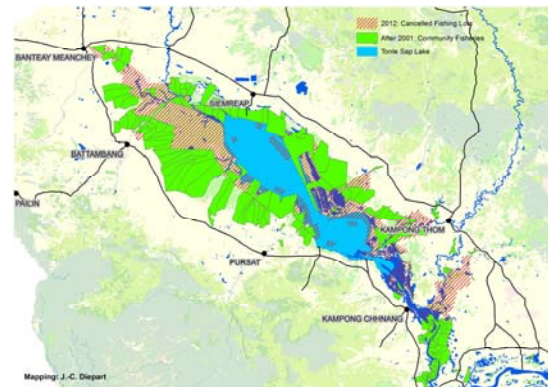
Map 1. Fishing lots as of 2000



Map 2. Fishing lots as of 2001 after the first fisheries reform



Map 3. Fishing lots and Community Fisheries before the second reform



Map 4. Community Fisheries after the second reform and the cancellation of fishing lots

Furthermore, even though the fishing lots area was halved, the first wave of reform did not modify the balance of power associated with [legal and illegal] large-scale commercial fishing and the collusions of interest between concessionaires. In fact, the issues that put fisheries management in turmoil remained unchanged during the first decade of 2000. It was only in 2012 that the Prime Minister initiated the second wave of reforms and declared complete cancellation of the fishing lot system. However, this decision created an institutional vacuum because it was not accompanied by clear direction as to how these fishing grounds should be managed.

Community Fisheries through the prism of the 'commons'

The mainstream approach developed to establish Community Fisheries was anchored in laws (Royal Government of Cambodia, 2006) and sub-decrees (Royal Government of Cambodia, 2005)³ and implemented through specific guidelines applied uniformly across the Tonle Sap basin. We now examine the content of the internal regulations of these community arrangements following the three elements of a *common* as defined by Bollier (2014).

³ The chronology of event is unusual: the implementation of Community Fisheries started in 2001-2002 on a pilot or experimental basis. These efforts were only formalized in 2005 following the release of the Sub-Decree of Community Fisheries management, which precedes the revised Fisheries law.

A resource with shared access

The boundary of each Community Fishery is often a straight line drawn on a paper that separates land and on the water and does not make much ecological sense (see Maps 3 and 4). Although fishing efforts may be controlled and specific areas reserved for conservation, fishes are mobile. The mobility of the resource stock casts doubt on the feasibility of artificially differentiating Community Fisheries one from another and from open access areas within a single watershed.

The delineation of CFI geographic boundaries generally includes a fishing area smaller than the area where fisher folk actually fish. Additionally, the access to a CFI is non-exclusionary in that non-members are free to fish inside a particular CFI ground as long as they respect its regulations. The combined effect of these factors creates two central problems: i) fishing grounds belonging to one CFI are used by both members and non-members of that particular CFI; and ii) many fisher folk are, at the same time, insiders in their own CFI and outsiders in others. This situation results in fisher folk adopting different logic and attitudes towards complying with the rules established by CFIs. Members of a CFI are likely to be more aware of rules and regulations in their own CFI, and are socially more accountable to the other members and to the management committee of their particular CFI. Consequently, they are more inclined to comply with the rules. Non-members are not necessarily aware of the CFI rules because they have not participated in the associated design processes; they are less accountable to the members and management committee of the CFI they are fishing in, and so are less likely to comply with their rules (or to limit fishing efforts to protect future stock). This is one of many reasons why illegal fishing has remained a central problem, despite the widespread establishment of CFI management committees.

A set of rights and duties assigned to the users

Fishing gear and activities in CFIs must comply with those classified in small-scale fishing categories. Despite these restrictions, the sub-decree on Community Fisheries does not limit the fishing gear numbers, size, and length, and/or individual catch, although these must comply with fisheries law and other related legislation. In the end, only capture determines benefits.

At the CFI level, there is a widespread perception among fisher folk that the individual fish catch is declining and a clear understanding that fishery stocks need to recover (Chap, Touch and Diepart, 2016). This is an issue that CFI management does not seem able to address, and is one that decreases the sense of ownership in respect of Community Fisheries management.

The right to operate community-based fisheries activities for income generation at the community-level is not granted by current Cambodian law. Despite support from the NGO sector, any CFI scheme has only a limited capacity to generate revenue to help finance its regular activities, such as patrolling, organizing, congress and consultations. The collection of a membership fee is foreseen, but the principle does not seem popular among local communities. In any case, this would not result in a budget significant enough to support the daily activities of the community, and for this reason, co-management arrangements are highly dependent upon external support. This absence of a collective commercial right to sell is a key obstacle. The CFI system cannot be sustained long term without adequate funding, which the Fisheries Administration (FiA) does not have or is unwilling to invest. A weak financial state therefore limits the negotiation power of the CFI in subsequent co-management deliberations.

A structure of governance

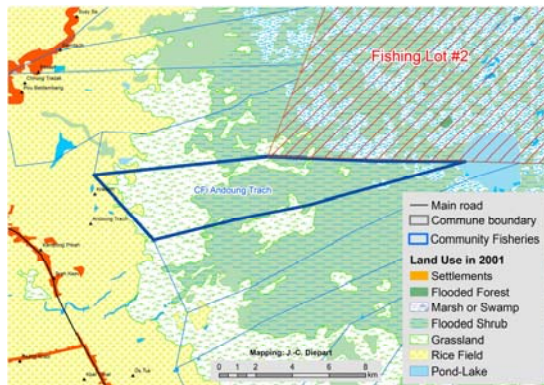
Even if the term 'co-management' suggests a sharing of rights and responsibilities among responsible government institutions at national and sub-national levels and the Community Fisheries group, the Fisheries Administration and local authorities at provincial level play central roles in establishing a CFI, approving a community's management plans, monitoring implementation, and ensuring enforcement of related laws including sanctioning. They even have the discretion to cancel the CFI area agreement if they think the CFI is not acting or performing well.

In a broader perspective any conflict resolution involving a breach of the CFI agreement and regulations must go through the FiA. No formal role is given to community-based management for conflict resolution within their fishery, despite the existence of conflict management mechanisms at the community level. In fact, the rights of the communities are specifically to enforce and comply with rules dictated by the FiA.

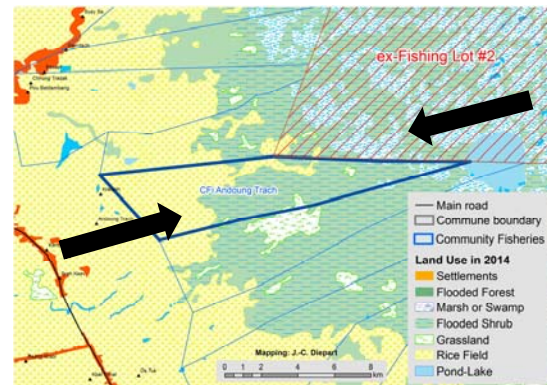
This definition of rights and responsibilities has two major consequences: a) fisher folk usually have a weak sense of ownership in respect of Community Fisheries institutions, given the strong control of the FiA over the whole CFI process; b) activities are sometimes undertaken exclusively by the CFI committee, creating a significant gap between CFI members and committee members.

The Community Fishery of Andoung Trach

The Community Fishery of Andoung Trach was created in 2007 as part of the fisheries reforms and institutional dynamic described above. It covers an area of 4,538 ha with 802 registered members. The resources managed by the CFI include the fishing ground (ponds and open water seasonally available) and a large fish habitat consisting of grass, shrub, forest and agricultural land. Maps 5 and 6 present the overall land use patterns of the area, the boundaries of Andoung Trach and neighboring Community Fisheries schemes as well as the ex-fishing lot #2. Institutionally, the Community Fishery is structured with internal regulations drafted in the same fashion as has been described above, and presenting similar shortcomings.



Map 5. Land use in Andoung Trach CFI (2001)



Map 6. Land use in Andoung Trach CFI (2014). Black arrows schematize enclosures

As schematically described in Maps 5 and 6 describing the land use dynamics in the area over the last 15 years or so, the Community Fishery is subject to two important enclosures. In fact these two enclosures are not limited to this particular CFI, but are actually prevalent in most CFIs established in the Tonle Sap plain (Chap et al., 2016):

- ⇒ Agrarian expansion shaped by a need for land, which is triggered by the demographic increase in the local population and also by urban entrepreneurs willing to invest in land and rice production
- ⇒ In 2012, the hope raised by the cancellation of fishing lot #2 was short-lived among local fishing folk. In fact, the opening of the fishing frontier created a space for opportunism, attracting commercial middle-scale fisher folk (mostly previous fishing lot owners and operators) who have continued to enjoy tacit protection from powerful people. They are not new actors but they took advantage of the institutional vacuum to pursue their activities and enclose the fishing grounds, using mostly illegal fishing equipment.

As a result, the flood plain fishing ecology has deteriorated and the decline in fish catch per unit effort has remained a central problem for all members of the Community Fishery. The reluctance - or slow responsiveness - of the provincial administration to crack down on illegal fishing, coupled with ineffective co-management arrangements, have left the CFI helpless and powerless to actually address problems.

The responses of fisher folk to these issues are multi-fold but divergent. On the one hand, a majority of households have lost faith in Community Fishery affairs, and have decided to quit and engage in permanent or seasonal job migrations instead. These jobs are diversified and the migration process does not imply labour specialization. Within a few years, the economic and social life of the village has gone through dramatic change: livelihoods are now much more dependent on migrant worker remittances than they are on fisheries activities. While social cohesion in the village used to be articulated around farming and fishing, it is now reconfigured around migration.

But on the other hand, a smaller group of people – mainly composed of, but not limited to, members of the CFI management committee – decided to reduce the scope of CFI management and target their protection efforts onto one single pond identified as an important fish refuge and spawning ground. The protected pond is located close to the village settlement area so that it allows for more effective and better controlled patrol and monitoring. Also, a number of agreements have been locally instituted. Through these, local police officers are empowered to arrest offenders without consultation with Fisheries Administration officials, and local fish traders are enabled to engage in small-scale community-based commercial fisheries. These locally-made solutions do not comply with legally defined rights and duties foreseen by the co-management arrangements. But despite their 'marginal' legality in relation to the sub-decree and rules of community fisheries management, they enable a more effective management of fishery resources.

Whose commons?

Fisheries reform in Cambodia has provided a larger space for the participation of communities dependent on small-scale fisheries. The establishment of Community Fisheries [was a ray of hope for all small-scale fisher folk living around the Tonle Sap. But fifteen years down the road, the success of the experiment can be questioned.

In the context of a difficult reform of the fisheries sector, Community Fisheries was embedded in a political economy of large-scale commercial fisheries that essentially excluded small-scale fisher folk. And despite substantial reforms, the structure and network power that govern major fishing operations in the Tonle Sap area have remained largely unchanged.

In fact, Community Fisheries has been a project initiated by the central administration of the State to address the social and economic exclusions triggered by the commodification of the commons. But the State has retained a central role in all co-management operations, and

the rights-based incentives and regulatory structures for Community Fisheries activities have been inadequate to include communities in their management.

However, in the interstices of the system, practices of 'commoning' and institutional *bricolage* are being nurtured on the ground - in Andoung Trach and elsewhere. These experiments are constitutive of another movement that counters the enclosure of the Cambodian fishing commons. But unlike the movement that initiated the establishment of Community Fisheries, this one is crafted locally by local interest and knowledge.

Bibliography

- Arias, M. E., Cochrane, T. A., & Elliot, V. (2014). Modelling future changes of habitat and fauna in the Tonle Sap wetland of the Mekong. *Environmental Conservation*, 41(2), 165–175.
- Balzer, T., & Balzer, P. (2002). *Traditional use and availability of aquatic biodiversity in rice-based ecosystems. I. Kampong Thom Province, Kingdom of Cambodia*. (M. Halwart & D. Bartley, Eds.). Rome: Food and Agriculture Organization.
- Baran, E., Jantunen, T., & Chong, C. K. (2007). *Values of inland fisheries in the Mekong River Basin*. Phnom Penh: WorldFish Center.
- Bollier, D. (2014). *La renaissance des communs*.
- Chap, S., Touch, P., & Diepart, J.-C. (2016). *Fisheries reforms and right-based fisheries: insights from community fisheries across Cambodia*. Phnom Penh: The Learning Institute. <https://doi.org/http://dx.doi.org/10.13140/RG.2.1.4006.5525>
- Degen, P., & Nao, T. (2000). *Inland Fishery Management in Cambodia: Is the fishing lot system the basis for improved management or should it be abolished?* (Mekong River Commission, Ed.). Phnom Penh.
- Degen, P., Van Acker, F., van Zalinge, N., Nao, T., & Ly, V. (2000). Taken for Granted: Conflicts over Cambodia's freshwater fish resources. *8th IASCP Conference*. Bloomington, Indiana.
- Diepart, J.-C. (2010). Cambodian peasant's contribution to rural development: a perspective from Kampong Thom province. *Biotechnology, Agronomy, Societies and Environment*, 14(2), 321–340.
- Evans, T., & Prak, S. (2008). *Livelihood Values of the Tonle Sap Inundated Grassland*. Phnom Penh: Wildlife Conservation Society - CEDAC and BirdLife International.
- FACT. (2001). *Feast or famine? Solutions to Cambodia's fisheries conflicts*. Phnom Penh: Fisheries Action Coalition Team & Environmental Justice Foundation.
- IFReDI. (2013). *Food and nutrition security vulnerability to mainstream hydropower dam development in Cambodia. Synthesis report of the FiA/Danida/WWF/Oxfam project "Food and nutrition security vulnerability to mainstream hydropower dam development in Cambodia."* Phnom Penh: Inland Fisheries Research and Development Institute.
- Jones, R. W., & Sok, S. (2015). Impacts and Implications of Deep Fisheries Reforms on the Governability of Small-Scale Fisheries in Tonle Sap Lake, Cambodia. In S. Jentoft & R. Chuenpagdee (Eds.), *Interactive Governance for Small-Scale Fisheries* (pp. 539–557). https://doi.org/10.1007/978-3-319-17034-3_28
- Luco, F. (1997). La gestion communautaire et la société traditionnelle cambodgienne. Villages dans la forêt inondée du Lac Tonle Sap, 1–143.
- Polanyi, K. (1957). *The Great Transformation. The Political and Economic Origins of our Time*. Boston: Beacon Press.

- Roberts, A. S. (2015). Lost in transition: Landscape, ecological gradients and legibility on the Tonle Sap floodplain. In S. Milne & S. Mahanty (Eds.), *Conservation and Development in Cambodia. Exploring frontiers of change in nature, state and society* (pp. 53–74). New York: Earthscan from Routledge.
- Royal Government of Cambodia. (2005). Royal Decree on the Establishment of Community Fisheries.
- Royal Government of Cambodia. (2006). *Law of Fisheries. NS/RKM/0406/011*.
- Royal Government of Cambodia. (2015). *The Strategic Planning Framework for Fisheries: Update for 2015-2024* (Ministry of Agriculture, Forestry and Fisheries). Phnom Penh, Cambodia.
- Scott, J. C. (1977). Patron-Client Politics and Political Change in Southeast Asia. In S. W. Schmidt et al (Eds.), *Friends, Followers and Factions: A Reader in Political Clientelism* (pp. 123–146). Berkeley: University of California Press
- Sok, S. (2014). Limited state and strong social forces: Fishing lot management in Cambodia. *Journal of Southeast Asian Studies*, 45(2), 174–193. <https://doi.org/10.1017/s0022463414000058>
- Thol, D., & Sato, J. (2015). The cost of privatizing the commons: Overlapping property systems in Tonle Sap, Cambodia. *International Journal of the Commons*, 9(1), 261–280.