A 'People's' Irrigation Reservoir on the Tonle Sap Floodplain

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My paper is about community mobilization and conflict around the issue of irrigation reservoirs in the floodplain of the Tonle Sap Lake in the one subdistrict of Kampong Thom province in Cambodia. The cooperative organization I will describe here might fit into Elinor Ostrom's models of Common Pool Resources (Ostrom 1990) and at first glance seems to represent a process of grass-roots empowerment. However, for this paper I am less interested in exploring the implications of Ostrom's model than of unraveling and documenting messy, morally complex processes of negotiation around land tenure, environmental, economic, social, and political considerations—processes which it seems to me reveal a great deal about changes taking place in Cambodia since the early 1990s. Underlying my study is the question: under what circumstances to Cambodian farmers mobilize, and what are the socio-cultural/political pitfalls of such mobilization at the present historical moment.

Samprouch subdistrict is one of several subdistricts in Stoung District, Kampong Thom province, which extend from the national road in the direction of the Tonle Sap Lake. The ecology of the Tonle Sap river and lake affects much of what I am going to describe here. As the land slopes gently up from the lake basin we see a progression from mangrove forests to brushlands to grasslands to the types of rice paddy lands iconically characteristic of the Cambodian lowland landscape. During parts of the year when the floodwaters are highest, waters extend almost to the national road; this fact

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in and of itself makes questions of land tenure complicated. Who has the right of access to the land when it is not flooded and the right to use receding water for irrigation purposes?

As an NGO official told me, the areas of mangrove forests, grasslands, and paddy land can easily shift from one category to another. Mangroves can be cleared and become grasslands or irrigated paddy land. Once abandoned, paddy land reverts to grassland and then to forest. This is a particularly delicate region ecologically, and the mangrove forests, which have decreased dramatically in recent years, are essential spawning grounds for Tonle Sap fish (Mak 2007) and indeed to the preservation to the lake as an ecosystem. The grasslands are home to an endangered species of bird (Gray et al, 2009). In addition to rice agriculture, also important to the economy of the floodplain are cattle grazing, gathering of reeds and other non-timber products, and the important use of ponds and lakes in the floodplain for the cultivation of edible lotus seeds and—most importantly—fishing.

The national roads circling the Tonle Sap lake defines roughly the furthest extent of the floodplain. The Ministry of Environment divides this area within the circle of the national roads into three zones: the zone closest to the national road, where agriculture and development can freely take place, the zone closest to the Tonle Sap Lake (in particular the area of mangrove forests) where all activity is clearly prohibited, and a buffer zone between the other zones, where any development plan must be studied and negotiated.

Villagers have memories of the forested areas extending quite close to the national road. (Apparently development onto the floodplain was also expanding in the 1960s; it is hard to know to what extent the forested area in people's memories was an expansion beyond pre-war coverage which occurred during the Pol Pot period and the times during the 80s when security concerns motivated rural populations to stay closer to the national road.) Although the Tonle Sap is very much in the heart of

Cambodia's rice-agricultural provinces, areas closer to the lake also have a reputation for being "wild" areas—beyond the realm of normal civilization--and during the 80s, Khmer Rouge guerrillas used the mangrove forests as bases during months when the water was low.

Historically, the Tonle Sap floodplain is associated with the use of "floating rice"—varieties of long-stemmed rice which grow with the rising floodwater (Lando and Mak 1994). Chou Ta-Kouon, a 13th century Chinese visitor to the court of Angkor, seems to describe this technique, which was still widely practiced in the period prior to the Pol Pot regime. Fox and Ledgerwood (1999) have also showed that there was the historically significant use of the technique of flood recession rice agriculture—that is to say, in contrast with floating rice (which grows with the rising water), the capture of water for irrigation purposes as it *recedes* from the floodplain *following* the season of flooding.

In the 1980s, following the Pol Pot regime, the People's Republic of Kampuchea (PRK) government tried to encourage the re-introduction of floating rice, and specific villages and "solidarity groups" were assigned locations on the floodplain to pursue this; later, as the "solidarity group" system broke down, locations were assigned to specific families (CAS 2006). However, use of the floodplain for floating rice never again became widespread. A variety of reasons are given for this: crops of floating rice were unsuccessful; perhaps, as some farmers say, it was because some varieties were lost under the Khmer Rouge when starving peasants ate seed rice; others have said that ecological changes in the lake has meant greater variation in water levels, making floating rice unreliable. In the 80s, villagers were also reluctant to farm in areas distant from the National Road for reasons of security—problems of banditry as well as the movement of guerrilla troops. A Center for Advanced Study report

(2006:50) also mentions "natural disasters (drought, flash floods, pests and roaming cattle)" as factors in the decision to abandon the floodplain.[2]

These attempts to re-initiate floating rice agriculture were then largely abandoned (although they provide some claim for land rights at the present time). I have been taken to isolated parts of the Tonle Sap floodplain in northern Batheay district, Kampong Cham province, where there is still floating rice agriculture. However, the general impression of most Cambodian villagers and government officials I have talked to throughout the country is that the practice has been completely abandoned.

Since the late 1980s, a number of large irrigation projects in the Mekong River basin of Cambodia—including the watershed of the Tonle Sap—have been funded internationally—many of them expansions or renovations of irrigation systems originally built prior to the war or during the Pol Pot period; in part because of their international funding, these have been extensively written about in reports. (CDRI 2010, Muukkonen 2007, Öjendaal 2000, Chou 2010, Khiev 2010, Ros 2010, Chem 2008) Most of these schemes have involved stream-diversion irrigation—that is to say, use of flowing water from rivers and streams for irrigation purposes. The Ministry of Water Resources, with the support of international funders, has encouraged the formation of "Farmer-Water User Groups", and these have already been the object of some studies—as has the general issue of the ways there can be better coordination of upstream and downstream users of water. Many of the specialists who have studied these systems have been affiliated at one time or another with Cambodian Development Resource Institute (CDRI).

[2] Yet another factor may have been, as one farmer told me, that in the 80s there were no merchants buying rice in the dry season. The intensification of dry rice agriculture at the present time comes together with merchants who will buy it—so it makes sense in a way that it didn't in the mid-80s.

There has been more limited research on gravity-fed systems in which annual floodwaters are captured in enclosed areas to be used gradually for irrigation in the season after which the waters have normally receded—that is to say, varieties of the flood-recession techniques Fox and Ledgerwood were concerned with. On a small scale, such systems also historically involved community coordination, in what Middleton and Prom have even described as localized traditions of Community-Based Natural Resource Management (Middleton and Prom 2008.) Some large-scale irrigation projects constructed during the Pol Pot period used this technique, including two projects in Batheay District, Kampong Cham which were successfully renovated since the 1990s and are now fully integrated into the Ministry of Water Resources and Mineralogy frameworks (MOWRAM) (Someth et al 2009).

The phenomenon which provides the setting for my current paper is a fairly sudden spurt in the building of this kind of reservoir in the floodplain of the Tonle Sap during the last decade, mostly by entrepreneurs—but a few administered by village or subdistrict government or, cooperatively, by groups of peasants. They feed dry-season rice crops using new varieties of fast-growing rice. The growth of this kind of reservoir, which as we shall see has proved very controversial, has been predominantly in the provinces of Bantheay Mean Chey, Battambang, Siem Reap, and, more than anywhere else, Kampong Thom, where it was actively promoted by the provincial governor. Stream-diversion irrigation schemes have been more favored in the provinces to the southwest of the lake, Kampong Chhnang and Pursat—the projects more widely written about in the literature. While the entrepreneurial irrigation reservoirs have been less researched than the internationally-funded irrigation schemes, there have been notable studies by agronomist Jean-Christophe Diepart (2007a, 2007b, 2010) and development specialists Ngo Sothat and Chan Sophal (2010). The larger question underlying my research is the relation of these mostly entrepreneurial irrigation schemes to the rural agricultural

populations and the trajectory of their social and ecological costs in the first decade of the 21rst century—although for the purposes of this paper I will eventually focus more narrowly on one single cooperative reservoir which developed in reaction to the entrepreneurial reservoirs.

The efflorescence of irrigation reservoirs has environmental, social, and political dimensions. Here I will initially speak broadly of Kampong Thom, the province where the construction of reservoirs has been most intensive and most controversial; in the course of this paper I will concentrate more and more on occurrences in Samprouch subdistrict, the site of my fieldwork.

Supporters of the reservoirs typically tell of visiting the floodplain during the dry season, looking out at the vast extensions of land, and thinking how greatly it would benefit Cambodia if this land—much of it far from mangrove forests, could be used productively.

Accounts of how the reservoirs began to be constructed in the area vary, but they were apparently the results of experiments by farmers and businessmen formerly involved in floating rice agriculture in Kampong Thom and adjoining areas of Siem Reap province, who were looking for practical alternatives. This captured the interest of the provincial governor of Kampong Thom, Nam Tum, who sponsored the construction of model reservoirs, in order to refine the techniques, and then encouraged more and more construction on the floodplain. One document I have seen dates some reservoirs to 2001 and 2002, and this may be about the time that land began being requested by entrepreneurs. They began building in earnest in 2003 and a momentum was created in 2004-5. In Samprouch subdistrict, the initial wave in which several entrepreneur acquired land for this purpose was in 2004. The numbers given for the reservoirs vary, partly because not all lists include the smallest reservoirs. There are currently about 18 in Samprouch sub-district and over 100 in Kampong Thom province alone. While the social and environmental impact was initially minimal this began to change

as the grid of reservoirs across the floodplain became denser and denser. Peasant populations in the area were initially skeptical that the reservoirs would even work; their attitude changed when land irrigated by the reservoirs turned out to be extremely productive. Moreover, the large extensions of land lent themselves well to more mechanized techniques of agriculture.

Floodplain land is considered state land and will probably continue to be for the foreseeable future—although part of the context of the events I am describing is the fact that the country is in the process of introducing systematic land registration throughout the country. This means, among other things, that populations are particular sensitive to land tenure and eager to secure land in the hopes that it may represent permanent access.

The 2001 Land Law introduced the possibility of Economic Land Concessions (Un and So, forthcoming). These have already had great impact on localities where they have been put in place, and there has been much NGO and IO criticism of the negative

repercussions for local populations where there was a tradition of access to the land.

A United Nations Human Rights report, for example, reports

> concerns about the lack of consultation with local communities, encroachment on land and detrimental impacts on traditional livelihoods, displacement, adverse environmental impacts, employment and labour conditions, violence and intimidation, and lack of effective remedy or recourse for affected communities. (Cambodian Office of the High Commissioner for Human Rights, p. 14.)

While the major land concessions are authorized at the national level, the law originally included the provision for smaller land concessions of up to 1000 hectares to be authorized at the provincial level. The law was changed to eliminate these provincially-authorized land concessions in 2008. The majority of the entrepreneurial irrigation reservoirs in Kampong Thom were authorized provincially under the terms of this provision—although some have been built since 2008 on land with claims to

having been purchased. Most are between 100 and 400 hectares in size and feed rice growing areas that are only slightly larger than the size of the reservoir.

There are in fact varying degrees of legality to the irrigation reservoirs: those on land authorized at the subdistrict, district, and provincial levels; those authorized only at the subdistrict or district level without ever getting formal permission at the provincial level; those constructed without any permission at all; those constructed after having been "bought" from peasants (who themselves may have had unclear claims to the land. There is also the question of reservoirs (or the farmland they feed) in relation to environmental law, and the director of the provincial office of the Ministry of Agriculture, Forestry and Fisheries (MAFF) told me that if reservoirs violate environmental zones they are illegal, even if they have been approved by the provincial government. There are, moreover, questions about whether lands granted by the province as land concessions were ever registered as "state private land," as required for them to be granted as land concessions. Finally, in Kampong Thom, contracts for the land concessions stipulated that at least 40% of the land would be developed cooperatively with the local community if they so requested, (but despite protests, such cooperative arrangments rarely if ever happened.) If even under the best of circumstances legality has an element of negotiation, this has been particularly the case here, where laws themselves are new and ambiguous and relate to socio-economic conditions which are also in a process of transformation.

Peasants typically refer to the large entrepreneurial irrigation systems as those of *krumhum*, or "companies," which underlines the degree to which they are recognized as representing agricultural systems qualitatively different from those of the peasants themselves. In fact, the owners of the reservoirs have up until now typically been fairly small-scale entrepreneurs, with backgrounds either in floating rice or fishing lots, or as businessmen. Some are persons in Siem Reap with longstanding

family or business connections in the district; others own businesses in the district town. One in Samprouch subdistrict was a long-term resident of the subdistrict whose modest house is near the national road. They are in many cases less characterized by wealth than by the kind of connections which would make them aware of trends in the provincial government. They are also people in a position to take out newly available bank loans. From the perspective of most peasants, the entrepreneurial reservoirs owners represent wealth beyond their dreams; there are times when, seen as such, one is tempted to paint them as the villains of the drama. However, one should keep in mind that by Phnom Penh standards their wealth is quite modest—and the investment needed to build a irrigation reservoirs is closer to what someone in Phnom Penh would pay to buy a modest Chinese-style shophouse than the investment one would need to build a shopping center. For these entrepreneurs, state moves to tear down reservoirs is a disaster. (Their defenders say that the real reason reservoirs are targeted by the state is not environmental protections, but rather to clear the land for larger-scale investors who are more truly *krumhun.*)[3]

There is I believe so far no documentation of the process whereby the environmental problems posed by the reservoirs came to public attention and Prime Minister Hun Sen came to call for their demolition. As the number of reservoirs multiplied on the floodplain there was more and more attention given to them by environmental NGOs, including FACT (Fisheries Action Coalition Team) and the Wildlife Conservation Society, each which advocated restrictions on the building of new

[3] Evidence of this possibility is the fact that the Cambodian Development Commission (CDC) has maps which indicate large tracks of the floodplain as possible sites for investors to develop as land concessions. There have already been feasibility studies by Chinese firms into these tracks of land (cite a, b, c), which have however not resulted in concrete projects. The firm Leopard Capital has also attempted to concretize a large project in the floodplain which would have authorization at the national level.

Yet another dimension of the whole situation is the fact that petroleum has been found in the Tonle Sap Lake and will eventually be exploited there. This could be another factor in motivating the state to restrict control of the floodplain areas.

reservoirs in at least some parts of the floodplain and were in dialogue with government officials. Probably, however, the opposition to the reservoirs which carried the greatest weight came from within different ministries of the government itself. Opposition to the reservoirs was based first and foremost on fear that destruction of mangrove forests would mean the disappearance of fish in the Tonle Sap. Other concerns were that the reservoirs were so densely situated that they interrupted the normal channels of water flowing into the lake. They also sometimes blocked the traditional pathways whereby pedestrians, bicyclists, and oxcarts gained access to the lowlands. Agronomists argued, furthermore, that despite the phenomenal productivity initially shown by the land, this could only be sustained in the future by extensive use of fertilizers, which could also have negative impacts on the eco-system, and might eventually call into question the profitability of the systems. Prime Minister Hun Sen in one speech broadcast repeatedly on television even made the broad statement that the reservoirs could result in the disappearance of the lake.

All this resulted in the fact that the national government announced in December 2009 that all the reservoirs would be razed. When Kampong Thom governor Nam Tum initially delayed the orders, it put into place a power struggle between him and Hun Sen which he could not win and perhaps hardened Hun Sen's resolve to have the reservoirs removed. A scattering of reservoirs were razed during the first half of 2010, when I was in Cambodia; I was unable to determine any particular pattern to which reservoirs were destroyed first. There have been newspaper reports of further bulldozing of reservoirs since then—a total of 45 in 2010 before the rains made it impossible—although it is far from clear that *all* reservoirs will be destroyed. A March 9 article in the *Phnom Penh Post* indicates that a demarcation process which will indicate which reservoirs are to be demolished is 25% completed (Khouth 2011).

All this provides the setting for what, as I stated at the outset, is the principle topic of this paper—the mobilization of grassroots rural populations in relation to all this. Any adequate study of the reservoirs must recognize that they have been the locus of significant conflict with local populations. Supporters of the entrepreneurial reservoirs typically make the statement that peasants were indifferent to their construction until it became apparent that they were highly profitable; it was only then that they decided that they should have a share in the profits. Such statements are hard to evaluate, since it is hard to construct a chronology of protests; however, since contractual agreements with the reservoir builders state that there should be cooperation with local communities, one can assume that the sensitivity of the issue was recognized from the beginning. It is clear that some protests occurred quite early, and that there was indignation quite early about misleading statements attributed to authorities about the nature of the reservoirs—such as that contracts were for five years, when in fact they were for 25.

The most obvious point to be made is that the floodplain was, as Diepart emphasizes, since time immemorial a source of common-pool resources for fishing, grazing of cattle, and gathering of non-timber products. The granting of land concessions meant that traditional access to the land was lost—in which could in classical Marxist terms be described as primitive accumulation.[4] Diepart argues that the value of resources now lost is as great as the value generated by irrigated dry-season rice fields.

The earliest published account I have found of disputes related to the irrigation reservoirs is in a 2006 study by the Center for Advanced Study on land disputes and how they are resolved in Cambodia in the context of new land law and newly decentralized forms of local government. One of three cases the report examines is 2005 land disputes in Stoung district, Kampong Thom; it examines the history in

[4] It is true that more recent land concession contracts are more likely to stipulate that traditional forms of access to resources—such as, for example, fish ponds, will be maintained.

three villages in the same subdistrict of disputes over the construction of irrigation reservoirs approved by the subdistrict chief. The name of the subdistrict is not given but appears to be one adjoining Samprouch. In two of the three villages there was significant resistance by the local population. In one (Village A), villagers had learned about the project while it was still being negotiated by the subdistrict commune:

> Although villagers did not agree to the project, the investor received approval for the project from the provincial authority and started to bring his construction equipment to the location. This movement prompted the villagers to go to the field armed with knives and axes to prevent the occupation of their land at to threaten to burn down the equipment if construction proceeded. The village chief and a commune councilor immediately appeared at the scene and appealed to the angry villagers not to use violence but to solve the dispute peacefully. Both sides agreed to stop the construction work provisionally until the dispute between villagers and the investor could be resolved. (Center for Advanced Study 52-3)

In this process opposition party representatives and human rights organizations became involved. Protests and meetings led eventually to the provincial governor deciding "to stop the implementation of the investment plan and allow the villagers to use the disputed land on condition that they cultivated rice there that year." (Center for Advanced Study 54) Eventually the investor decided to abandon his plans to build a reservoir. Events in another village (Village B) followed almost the same pattern—a confrontation with armed villagers followed by meetings and a similar decision by the provincial governor—with the only difference being that at the time the report was written the investor had not abandoned his intentions. A third village (Village C) decided that instead of protesting they would push for financial compensation from the investor, and this was negotiated successfully—although some villagers only agreed to this reluctantly, feeling that they had no choice.

It is hard to make generalizations about how the irrigation reservoir projects relate to the adjacent rural populations. It is unquestionable that there has been significant conflict, and in my analysis this relates to something basic to the underlying change in the relationship to resources. But as

I tried to understand what I was able to learn about conflicts in the floodplain more clearly, it seemed that some reservoirs were the locus of more conflict than others.

A variety of different arrangements have been worked out in different settings. In some early cases, investors built a third reservoir to be used by villagers at the same time they were building two for themselves. This is described by Ngo and Chan as occurring in Chamnar Kraom subdistrict [and investor Iev Vanna told me he had done this in Kampong Ko subdistrict]. The reservoirs of this kind described by Ngo and Chan are administered by subdistrict officials and poorer villagers are given access to the irrigated land form year to year on a rotating basis. Ngo and Chan describe this as the most "pro-poor" arrangement of the different kinds of reservoirs. It may represent investors attempts to abide by the contractual agreement to work 40% of the irrigated land cooperatively with villagers. Unfortunately, this practice has not continued, perhaps because investors came to realize that they would not be compelled to abide by the 40% requirement. There are no reservoirs with this arrangement in Samprouch subdistrict.

The evidence about the extent to which the reservoirs have provided significant rates of employment to villagers as laborers, is somewhat contradictory. Ngo and Chan, studying Chamnar Kraom and Samprouch subdistricts, say it has, and this is a major argument in support of the reservoirs. Diepart, writing about Srayov subdistrict in Kampong Thom in 2010, seems to support Ngo and Chan's findings, whereas he wrote about Samprouch and Msa Krong subdistricts in 2007 that:

> Most of the local people interviewed in the area (Msar Krong and Samprouch communes) said that so far they were neither recruited for the construction nor as wage laborers inside the cultivated area. The entrepreneurs investigated stated that this was because they wanted to make sure the system can run without local peasants' involvement during the first years. (2007:21)

My own interviews, based on less scientific samplings, tended to support Diepart's 2007 statement. I was told that because of the greater mechanization of the entrepreneurial reservoirs, there was less need for labor, and not all of the labor came from the general population of the subdistrict. Investors might favor their own relatives or bring in workers from Siem Reap.

Some reservoirs owners, while maintaining control of the reservoir itself, sell parts of the land it feeds to local farmers; others rent it out; and in a few cases there has been sharecropping. Besides more formal arrangements with land immediately below the reservoir that feeds it, there are increasingly less formal arrangements with peasants using the water as it continues to flow past these fields. Some reservoir owners let farmers use the water for free; others charge a nominal fee.

In Samprouch there are two reservoirs linked to specific villages. In one case the village effectively owns and operates the reservoir. In another case the village grants its right to the reservoir to an entrepreneur. In an adjoining subdistrict, the land now occupied by a reservoir was in the 80s allotted for floating rice cultivation to yet another subdistrict on the other side of the national road. This other commune now officially owns the reservoir in the subdistrict closer to the Tonle Sap, but rents out its right to the land to an irrigation entrepreneur—a legally justified arrangement which is nevertheless sensitive to residents of the subdistrict where the reservoir is actually situated.

While villagers in many locations have been opposed to the construction of entrepreneurial irrigation reservoirs, or felt that they were not adequately compensated for their loss of access to the land, there are also peasants who, having worked out agreements for agricultural use in conjunction with one of the entrepreneurial reservoirs, find themselves dependent on this for their livelihood—and are now vulnerable if a policy is implemented whereby reservoirs are destroyed.

All this brings me finally to the topic of the "People's Reservoir" in Samprouch subdistrict, which my title indicates is the topic of this paper. I should start by pointing out that, despite the way the phrase "people's reservoir" resonates in English, this is not in the end the story of a particularly leftist or activist project (although it did grow out of earlier protests). I would like to describe it as the complex outcome of processes of negotiation, itself marred by accusation of corruption and complicity with authorities and built in environmentally questionable areas—but which has nevertheless represented a practical solution for at least some villagers.

The pattern of dispute in Samprouch commune is consistent with some of what I have already described taking place in other parts of the province. Although the People's reservoir was already being formed when I did preliminary research in the subdistrict in July 2009, what was most salient in my conversations with villagers was a sense of grievance and the attempt to organize in the face of that grievance. These grievances took a number of forms (and some may have been more important and different points in time.) There were complaints that they had been led to believe the contracts for reservoirs were for five years, when they were for 25—or simply that they had been encouraged to put thumbprints on documents without being told the implications of what they were doing. Some villagers were left with the impression that the reservoirs would revert to villagers after a certain number of years, but that was not happening. There were reports of the subdistrict chief having encouraged people to "sell" land, even though compensation was minimal (and fear that if they did not accept this money they would receive no compensation at all). There was discussion of different ministries taking different sides in disputes. The people had gone to the human rights NGO LICADHO in the provincial town and to other NGOs requesting their help. C. had police with arms threatening people.

There were also what I now understand to be the complaints of *individual* farmers who had previously been granted access to floodplain land for specific purposes, whose claims were swallowed by the newly built reservoirs. (One man had gone to the provincial capital and had limited success—limited because while his use of the land had been authorized at the subdistrict level prior to the granting of land to the reservoir investor, it had never been authorized at the provincial level. He was pleased with the outcome because others, he said, had simply lost all their land because they hadn't dared to fight at the provincial capital.)

Dissatisfaction came to a head in the 2007 subdistrict council elections, when an SRP opposition party candidate was chosen over the incumbent, the candidate of the dominant Cambodian People's Party (CPP).[5] If nothing else, the election of a SRP subdistrict council chief signaled to the provincial governor's office that there were significant problems surrounding the reservoirs that needed to be addressed.

One of the leaders of demonstrations against the reservoirs was a farmer around 40 years old I will call PP. Around this time PP and other protestors came to decide that instead of protesting existing reservoirs they would push to control a reservoir themselves. In my conversation with villagers, PP is commonly identified as the leader of the People's reservoir, although I would later learn it is administered by a committee of three.

They called to be given a large plot of land (360 hectares) on a tier of reservoirs quite low in the floodplain—one that had already been promised to another investor, C, who had delayed in developing it while he was developing another large reservoir. Against C's protests, the land was given to "the

[5] The SRP candidate was the brother of his opponent, the incumbent subdistrict council chief. The actual political implications of this are unclear, since the power of the new council chief has been significant circumscribed and most decisions continue to be made by CPP. The new subdistrict council chief, however, has been a supporter of the People's reservoir.

people" of the commune by the provincial governor Nam Tum in March 2006. (Part of the justification for doing this was that C. had delayed more than two years since he was given permission to build.) Representatives of the provincial government attended meetings held with villages at one of the wats, and from the perspective of those involved, a "community" was formed with the recognition of the authorities.

Various problems have emerged and tensions were still very much in evidence during my field work in the first half of 2010. PP is a relative of the two brothers who are the current and former subdistrict chiefs. There is not too much that would distinguish him from other villagers, but his brother is a village schoolteacher, and he has slightly more education than most of his neighbors.[6] His family was traditionally involved in trade in fish. His modest wood house might be slightly bigger than the others around it. He became involved in the People's reservoirs because of his earlier involvement in protest. He had been chosen in community meetings to be a representative to talk directly to C. and another major reservoir owner K. During this time he was subjected to threats of violence. However, there is no sign that he is an activist in the sense of being ideologically motivated. His involvement with the reservoir has brought him in contact with the (now) former governor of the province, Nam Tum, whom he mentions in conversation. He himself has a small 60 hectare reservoir which, though built after the People's reservoir, is, he says, on land he acquired prior to the building of the People's reservoir, so, above and beyond the People's reservoir, he is invested in the economy of the reservoirs.[7]

While Nam Tum and other representatives of provincial of the provincial government were present the meeting to form the reservoir, and may have helped to devise the plan for it, it is by no

[6] He also happens to be the cousin of a well-known monk who is now the abbot of a wat in Phnom Penh.
[7] One claim used to discredit him is that he used money contributed to the People's reservoir by its members to buy his reservoir.

means clear that there is a legal basis for the People's reservoir. Whereas in the case of the entrepreneurial reservoirs, contracts were signed, the subdistrict chief told me this wasn't done with the People's reservoir, because "it wasn't necessary." The provincial chief of MAFF for Kampong Thom told me that the reservoir community had applied for formal recognition as an agricultural cooperative, but he had turned it down because the farmland fed by the reservoir clearly extended into areas of flooded forest, and because he had questions about PP, as a reservoir owner himself, who might be linked to outside interests. The People's reservoir is also not recognized as a Farmer Water User Group by MOWRAM. (There are no formally registered FWUCs in the floodplain area of the Tonle Sap in Kampong Thom.)

Upon formation as a community, the rice land below the People's reservoir was assigned to participating families by lottery; 1009 were each assigned one hectare. During my research in 2009 and 2010, members were actively clearing areas of flooded forest to be used as riceland fed by the reservoir. This was universally described as extremely hard, backbreaking work. They new this was illegal and that they could be fined the equivalent of about US $200 if they were caught. They knew this was destroying fish spawning grounds, were embarrassed by this fact and laughed sheepishly about it over palm wine—but felt they had no choice if they wanted to survive as farmers. (Villagers until recently supplemented their income significantly by fishing in the floodplain. In a vicious cycle, there is now less fish—perhaps because of the reservoirs—and this forces them to cut down more flooded forests, which will further reduce the fish.)

The chief complaint against the People's reservoir is that, although it pretends to be for all the residents of the subdistrict, many have not been able to participate. Of the 15 villages in the sub-district, only 12 participate in the reservoir, and of those 12 villagers, some have larger numbers than

others. Some of those not participating perhaps simply did not join early enough; some did not feel that they could pay the $200 fee that was being charged; it to that extent may discriminate against the poorest of the poor. Anger rose to a sufficient pitch that in 2008 a group of farmers from the subdistrict went to Phnom Penh to protest at the National Assembly. (Since C is still working to regain the rights to the reservoir property, there have been accusations that C was supporting the protesters. Some I interviewed said no; there may be some villagers who genuinely feel that cooperative farming agreements with a reservoir owned by C would have been more beneficial.[8]) While Phnom Penh protests did not lead to any support from the national government Nam Tum called for the reservoir to be open to all villagers in the subdistrict. PP said he would take smaller contributions from other villagers who would be part of another reservoir when he found the land for one—but couldn't guarantee that he could or promise to return money if he didn't. This led to criticism that he was simply taking money for his own use. There has also been criticism by *members* of the reservoir, who feel that money has been required arbitrarily, such as a fee for having the right to clear plots of land, and that this money is going into the pockets of the administrators and not to the reservoir project as a whole. I cite these stories not to attack PP or the People's reservoir—from what I have heard so far, I think most of PP's actions have been justified—but to convey the sense that the reservoir project is still colored by doubts and, as it were, undergoing birth pains, with many issues still unresolved. It is to its credit that it brings together participants at marginal levels of subsistence trying to negotiate for their continuing livelihood.

During several visits to Samprouch in the first half of 2010, villagers were aware that some reservoirs were being destroyed, but were fairly nonchalant and optimistic that theirs would be an

[8] A group of 800 families supported C., who was offering an arrangement whereby farmers could work land fed by his reservoir, paying between 800 kg to 1000 kg for each hectare they worked.

exception. In July, on my last visit to the subdistrict, however, I arrived to find that many villagers affiliated with the reservoir been down to the site of the reservoir for the last two days. This was prompted by the fact that several reservoirs in the neighboring subdistrict, Msa Krong, had been dismantled in a short period of time by teams arriving by helicopter, and they were afraid that authorities would next move to Samprouch. Members of the People's reservoir had camped out for several days, preparing to plead for the reservoir if attempts were made to destroy it. PP would later tell me that all 1009 members of the reservoir were there. (Members of the reservoir community were no doubt eager to participate—but I also later heard stories that PP had said he would fine members who did not come at this time.) By the time I arrived, the issue was mostly resolved, but one could see the frames of makeshift shelters where villagers had been sleeping. Around the reservoir they had put poles with small Cambodian flags—and under them (conspicuous, since the village had voted for SRP in the commune elections) flags with the symbol of the dominant Cambodian People's Party. Representatives of the reservoir told me (as did PP when I later interviewed him) that they were not protesting—they were appealing to the authorities for mercy to spare the reservoir. A helicopter with the Minister of Water Resources and Mineralogy had flown over to inspect the site. Journalists had come from Phnom Penh (but were no longer there when I arrived.) A team of representatives from the different ministries involved had visited them and finally gave them demarcation markers. They were told to very carefully demarcate the boundaries of the People's reservoir land; this seemed to imply that it would be spared when it finally came to the demolition of reservoirs. It also meant that there could be no further clearing of land outside the border markers once they were established. On July 6 they submitted a formal letter petitioning that the reservoir be spared; it was stamped already as having been received by the subdistrict chief, the district chief, and the head of the provincial committeee;

presumably it was to passed on to Hun Sen. That the reservoir would not be demolished was confirmed later to me by a provincial official. This of course remains to be seen.

Conclusions

What does all this mean? I see it as having to do with a major shift in land regime which has to do, not just with new land laws, but changing economic relations qne changing relations of the state and other actors to natural resources. Maurice Bloch, with reference to Marx, describes "the clear realization throughout [Marx and Engel's] work that property is represented by ideology as a relationship between people and things but is in material terms a social relationship." (1975: 204) I find this largely true (even if I do not take it to mean that a given land regime inevitable suggests given social relations.) Clearly the fact of change draws attention to the fact that "property" is itself ambiguous and subject to negotiation. The particular situation I am examining occurs in a setting which is particularly vulnerable environmentally, at a time of environmental change—which becomes part of the dynamic and creates part of the moral complexity of the situation.

What I describe is a historical adjustment to change, which to some degree could be called "resistance," but not resistance in the sense of a unified, miltant struggle ibut in a more fluid sense of negotiation, re-adustment, and sometimes compromise. We see degrees of defeat, but we also see rural communities mobilizing in what seen to be new ways.

Sherry Ortner (cited in Tania Li 2007: 157) writes: "Resistance studies are thin because they are ethnographically thin: thin on the internal politics of dominated groups, thin on the cultural richnes of those groups, thin on the subjectivity—ñthe intentions, desires, fears, projects—of the actors

involved in these dramas." I hope my study at least gives a sense of some of the complexity and irony of "resistance."

From a strictly environmental point of view, the People's reservoir was a negative development, in that it involved further intrusion into the area of flooded forests on the Tonle Sap floodplain. In political terms, it may have in some sense represented defeat, to the degree that the population of a subdistrict which had voted for an opposition party was in the end putting up flags of the dominant party and appealing to it for mercy. One can also say that the People's reservoir was less than successful in the degree to which it was plagued by internal disputes. Nevertheless, I find something positive in the very fact that a group of rice farmers could come together to the extent of creating a working alternative to the privately-owned reservoirs that were springing up around them and seemingly squeezing them out of their livelihood.

The People's reservoir did not have the kind of state encouragement that in recent years has been given to community-based natural resource management or FarmerWater User Groups or agricultural cooperatives in other contexts. They did not succeed in getting the kinds of official recognition that these groups did. Nevertheless, I believe that the zeitgeist in which these other kinds of new rural organization may have something to do with the moment created around the People's reservoir. The community came together first out of protest and then out of a common desire to create opportunity for themselves in a difficult situation.

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