Life, Fish and Mangroves
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I came to Koh Sralao in 1988 because I did not want to be a soldier anymore. People told me about the opportunity to work for a businessperson who was growing marijuana. I came to the village thinking that I would be a worker but the plantation was shut down shortly after I arrived. So I had to learn to fish. I learned to fish from people nearby, asking them questions about their nets and about the water. I built a house on the water and used candles at night to catch crabs with my hands.

I decided to stay. I did not know anyone, so I had to find a middle-person who could help me in harder times. After a year, I had saved enough money to buy a boat. I still caught crabs but I used a bamboo trap instead of candles. Even today I still catch crabs, but I now use nets and go deeper in the water since I know where to look.

Although my life is better now than it was, since my children can help me earn money for our family, I do worry about the future. There are now more people interested in our fishing grounds... bigger fishing boats and barges that carry sand... and sections of my nets are destroyed each year. It is harder to catch a consistent amount of fish, even when I fish further from home. My children need to do something else, but I do not know what else they can do here. I like this area, and would prefer to stay if possible.


Although I met with many individuals and groups throughout this field research, the most consistent, in-depth work took place with key informants in six households that
Multiple factors have affected Mat Sok’s livelihood situation: enforcing government policies such as the government crackdown on growing marijuana, declining fish stocks, limited educational opportunities in the village and a general lack of money. The above excerpts illustrate the ongoing challenges that this fishing household deals with. Sok considers his household to be economically poor, although he feels that it is tight-knit and well supported within the Muslim community (around ten percent of all households in Koh Sralao are Muslim; the rest are Buddhist) and within the village more generally. Several times when Sok’s fishing gear has been stolen, for instance, neighbours lent him old gill nets that enabled him to save enough money for new gill nets rather than having to borrow money. Sok is also involved in community activities, working within Koh Sralao’s Mosque Association and, at various points, working with the local resource management institution (which will be discussed in greater detail in Chapter 4).

Sok has been able to send his children to the village school (with classes until grade nine) by using gill nets, a fishing gear that he can handle by himself to catch crabs. Sok’s wife Narin extracts the meat from the crabs he catches and sells the crab meat to a local buyer. She sometimes peels extra crabs as a way to generate additional income for their household. Recently, Sok’s two oldest sons finished grade nine at the village. One son started to fish with him, which increases the amount of gill nets that Sok can set, and the other son found work in a factory near Phnom Penh. Unfortunately, sending either son to high school in the provincial town was out of the question for

I began carefully working with in 2002. For each of these households, I explained this book project and discussed the pros and cons of using names or pseudonyms. We agreed that I would quote people directly to give credit to local experts unless a topic was too sensitive (relating to politics or issues of power, for example). In these cases the name of the person and the year of the discussion is placed after the quote. For all other sources, information is presented in such a manner to ensure confidentiality.
Sok, which is the case for most villagers. A concern for Sok’s household has been the continuous decline in fish catch over the past years, coupled with fishing gear getting consistently stolen or destroyed. Sok’s livelihood is enmeshed within a complex social-ecological system that is in continuous flux.

This chapter attempts better to understand such fluctuation. My goal in writing this chapter is to account for the social-ecological changes that have taken place within this mangrove-estuary village over a twelve-year period, 1998–2010, paying particular attention to the livelihood trajectories of a handful of households and the ongoing stresses endured by these villagers. I am curious to understand the local opportunities that may arise when living in an area where resource extraction is the norm and if this has enhanced or diminished general development opportunities for villagers. This analysis sheds insights into why villagers started working toward resource governance and specific management activities, which are explored in the subsequent chapters.

INTRODUCING KOH SRALAO VILLAGE

Koh Sralao village, the village where much of the detailed field research has taken place, is located within the mangrove-estuary forests that populate the shorelines of southwestern Cambodia, 25 km from the provincial capital of Koh Kong town (located in the province of the same name, Koh Kong province) (see Figure I in Prologue). Until 2009 the population was steady at around 1,900 people, with three hundred or so households. Only in the past year, or maybe two, has Koh Sralao experienced a rapid out-migration (which will be discussed later in this chapter and again in Chapters 5 and 6). Koh Sralao village is accessible only by boat, which can take anywhere between forty-five minutes to three hours from the provincial capital. The village also lies within 30 km of the Thai border. People in
the area rely on trade with Thailand, although this has changed since the early 2000s when a road was reconstructed to connect the provincial capital with the rest of the country. Traders, from within the village and from outside, continue to buy local fish that is then either sold to Thai buyers or buyers from Phnom Penh. The main changes that have come with the reconstructed road—increased access of outsiders into the province, land-grabbing, business opportunities—have recently been felt in the village. Nonetheless, Koh Sralao village continues to be considered as a remote (since it is boat-access only), relatively poor village by Cambodian standards. Koh Sralao is one of a handful of mangrove-estuary fishing villages in this area.

Basic services in Koh Sralao village were minimal for many years, although this started to change in the early 2000s. Schoolteachers were willing to stay in the area and a new primary school and a new junior high school were built in 2005. That being said, children who want to go to high school need to leave the village for the provincial town of Koh Kong. Health services remain minimal, although a doctor now comes into the village once a month. Electricity vis-à-vis a generator is now offered in all parts of the village with half of Koh Sralao’s households being able to afford this service. Water can be pumped into richer people’s homes, for a monthly fee. Since 2007 cell phone coverage has reached the village, which has made communication far easier. Before then, only a few households owned a walkie-talkie radio system that connected to villages within a 20 km radius. Table II contrasts the differences in services between 1998 and 2010. Worth noting, poorer households cannot afford electricity or to have water piped into their homes; at the same time, most children now attend school, especially primary school.
Having briefly introduced the village, I now turn my attention to the lives of six key informants and their families. I began meeting formally with these key informants in 2002 as part of my dissertation research to gain further insights into daily life in Koh Sralao. Although most household information was shared through the eyes of my main contact, other household members frequently contributed to this picture mainly as time
went on. Table III illustrates the diversity of situations found among households in Koh Sralao and highlights the variation in livelihood activities between their initial arrival, what they did in 2002 and what they did in 2010. As Table III illustrates, many people moved to the area to pursue nonfishing-related resource extraction activities (working at the marijuana plantation, then turning to other activities including logging and charcoal making) and only came to depend on fishing at a later point.

When I first began working with these households in 2002, five out of the six households pursued some form of fishing as their main livelihood activity.⁹ Wealthy households specialized their fishing activities, setting large traps 5–6 m below the surface of the sea or using a large circle net to gather fish. Less wealthy households fished using gill nets or crab traps. Milorn, the only female-headed household in this sample, was not involved in fishing activities in part because of gender constraints and in part because of her history as a business woman. Although most households pursued fishing activities as their main livelihood activity, many took advantage of nonfishing activities when they arose. For example, one year households were able to sell freshly picked mushrooms found in the mangrove back-swamps to a Korean buyer, but the mushrooms were over-harvested within one season. Another year a few

⁹ There are two main places that people from Koh Sralao village fish: (a) in the mangrove-estuary areas near the village and (b) in a productive shallow-water bay area known as Chrouy Pros Bay. The mangrove-estuary areas, surrounding the village, provide an excellent habitat for a variety of aquatic species such as shrimp and mangrove mud crabs that use the muddy bottom for their home and feed on mangrove leaves. Koh Sralao fishers fish in the mangrove estuaries or may go further afield to join other fishers in Chrouy Pros Bay. Here fishers set their nets and traps for swimming crab and grouper species. These fishing grounds begin around 5 km from the village; as such, one requires a motor boat to access this area (about half of Koh Sralao’s fishers fish here). There are no exact numbers in terms of who is accessing either of these fishing grounds, although far more people in the area are dependent upon Chrouy Pros Bay, since it is a particularly productive ecosystem and several villages are located at the edge of this vast bay.
households tried to cultivate green mussels, but this foundered because Thai buyers were not interested in buying from Cambodian fishers that year. These types of nonfishing activities tended to be one-off, short-term opportunities, although there are also cases of households being able to open and sustain small food shops in front of their homes.

By the mid-2000s, however, households began discussing livelihood strategies that would enable them to exit the fishery completely, either through migration or by developing a suite of livelihood activities that did not depend on the fishery. Milorn and Dom are examples of two households that left the village in the mid-2000s to pursue nonfishing livelihoods, whereas Wayne and Sovanna are examples of two households that abandoned their fishing activities but have been able to pursue other livelihood activities within the village. This is particularly telling in Wayne’s case, since Wayne was born into a fishing household: Wayne’s grandparents, parents and Wayne himself were fishers, and Wayne earned a significant portion of his income from specialized fishing activities. Yet by 2008, Wayne no longer used fish traps nor practiced any type of fishing:

I no longer fish since it is less predictable than in the past. Although I did not find large groupers in my fish traps for several years, I did catch some in 2007. So I could do this again if I had to, but it is risky and I would catch less than I used to since there are more trawls in the sea. Also, I want to protect my health and not work too hard, and I now have competition from several other fishers who recently learned to dive (2009).

Wayne’s reasons for diversifying beyond the fishery are linked with age, competition, risk and working with a resource that is becoming increasingly scarce. He has not encouraged his sons or daughter to enter fishing as a livelihood activity. Wayne’s household operates one of four taxi boats, controls much of the
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<tr>
<td><strong>Name:</strong> Sovanna&lt;br&gt;<strong>Age:</strong> 47&lt;br&gt;<strong>Marital Status:</strong> married&lt;br&gt;<strong>Children:</strong> 11; 20 living in HH</td>
<td>Arrived in the late 1980s to work in the narcotics plantation; learned to fish and ran a coffee shop; became a fishing middleperson in 1990s.</td>
<td>Middleperson (crab and grouper—lending fishing gear with clients selling product at reduced price); fisher (circle net); sells luxury goods (beauty products); exploring farming options in another province.</td>
<td>Moneylender; farmer (10 ha—sells fruit in village); no longer fishes or tries farming elsewhere; considering growing rubber.</td>
</tr>
<tr>
<td><strong>Name:</strong> Wayne&lt;br&gt;<strong>Age:</strong> 51&lt;br&gt;<strong>Marital Status:</strong> married&lt;br&gt;<strong>Children:</strong> 3; 4 living in HH</td>
<td>Long-term resident of area. Pursued a range of activities: some illegal (charcoal production and dynamite fishing); some legal (trap fishing).</td>
<td>Fisher, sets deep-sea traps for high value species (grouper); sells basic goods from home; also sells ice (only person in village to do so).</td>
<td>Stopped fishing in 2008; controls water supply for village; son is a taxi boat driver; claimed 2 ha of land in village; active in politics.</td>
</tr>
<tr>
<td><strong>Name:</strong> Preun&lt;br&gt;<strong>Age:</strong> 62&lt;br&gt;<strong>Marital Status:</strong> married&lt;br&gt;<strong>Children:</strong> 3; 5 living in HH</td>
<td>Came to area in 1984 to work at narcotics plantation, switched to crab fishing.</td>
<td>Crab fisher (150 traps).</td>
<td>Hires labourer to operate his crab traps (150 crab traps); runs a section of the village electricity supply (operating a generator that supplies 1/3 of the village); small home shop.</td>
</tr>
<tr>
<td>Name: Milorn (f)</td>
<td>Came in 1984 to work at the narcotics plantation, became a middleperson for charcoal.</td>
<td>Makes cakes; rents newly constructed home to gamblers; raises pigs (2003).</td>
<td>Left village to farm (2008).</td>
</tr>
<tr>
<td>Name: Dom</td>
<td>Came to village in 1990 to fish, then became involved in transporting logs until he was caught in 1999.</td>
<td>Crab fisher (200 traps); operates a karaoke shop; sells dog soup (2002–2003).</td>
<td>Left village to farm (2005).</td>
</tr>
<tr>
<td>Name: Sok</td>
<td>Came to village in 1988 to work at narcotics plantation that closed down shortly after. Learned to fish.</td>
<td>Crab fisher (gill nets, 2,000 m); raises chickens.</td>
<td>Continues crab fishing (gill nets, 3,000 m); first son working at a factory near Phnom Penh; second son helps with fishing; raises chickens and ducks.</td>
</tr>
</tbody>
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1 Households are listed in order of economic wealth (from the wealthiest to the least wealthy). Note that no one in this sample belongs to the ultra-poor category (i.e., landless and struggling more than most).
household water supply business, and recently obtained two hectares of farmland in the village (although this land is contested and it is unclear if he will be able to keep it). Meanwhile, his daughter married the local schoolteacher in 2007 and recently moved with her husband to the provincial town. She is the first family member to leave the village in at least three generations.

Sovanna, too, has chosen to pursue nonfishing-related livelihood activities. In 2002, when I first met Sovanna, he talked about wanting to do farming. At that point, Sovanna was negotiating a land claim in the village (for 10 ha of land that was contested by another villager) and had bought land in another province. Between 2003 and 2005 Sovanna divided his time between Koh Sralao and his new farm, around 500 km from Koh Sralao, where he planted mung beans. This, however, proved too difficult to manage and once his land claim was settled in Koh Sralao he decided to focus his farming effort in the village. Sovanna began planting fruit trees in the mid-2000s and now sells his fruit in the village. He plans to expand into rubber. Farming is a real switch for Sovanna and his household since for many years Sovanna was a middleperson10 (providing

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10 In the late 1990s and early 2000s, villagers borrowed money from a local moneylender/fish buyer, and were then required to sell their catch to that particular moneylender/fish buyer at a reduced price. In exchange, fishers could delay loan payments, when necessary, and could sometimes get a cash advance. Such relationships, classified as patron-client relations, did play a role in village life, although there were limits to this relationship (the idea of a generous patron, à la James Scott, does not appear to obtain in Cambodia) (Legerwood and Vijghen 2002). By the mid-2000s, however, most moneylenders stopped buying fish products, rather switching to lending out money at high interest rates. This was at the same time that a few fishers began to access credit from the bank located in the provincial capital, Koh Kong town. Although interest payments are generally lower with the bank than through a moneylender, the bank offers no leniency for those that cannot meet their payments. This is problematic if the fishing season is poor, or if a fisher becomes ill and cannot fish. Even so, fishers are increasingly reliant on the banks since moneylenders are being more demanding in terms of repayments and are less willing to lend out money, often citing fisheries declines as the reason.
fishing gear to households in exchange for them selling their aquatic products to them at a reduced price) and a specialized fisher (operating a circle net).

It is rather telling that in a coastal village, only two of the six households in my sample continued to be involved in fisheries in any significant way by 2010. In the short period of time between 2002 and 2010, many households’ main livelihood strategies had shifted. Sok and Preun were the two key informants whose households continued to rely on the crab fishery, mostly because they felt they had no other options available to them. As Preun explained, “There is no future in fishing here, since the fish are smaller and less abundant. I hope that my children can be creative and find a new opportunity for themselves, but I do worry. For poor people it is not so easy to improve one’s situation” (2008). There is the recognition that fishing is unlikely to deliver a sustainable livelihood, yet most households who remain in the village continue to fish because of a perceived lack of alternatives.

This is not to suggest that Preun and Sok’s households have not tried to diversify into nonfishing activities. Preun owns a small shop that sells fruits and vegetables, and runs a generator that supplies electricity for one-third of the village. He spent most of his savings on sending his son to college in Phnom Penh in the hopes that his son would then begin to send back remittances once he started working. To Preun’s disappointment, this did not happen. In 2009 Preun’s household cleared 1 ha of land 10 km from the village in the hope that someone would want to buy the land. This is highly unlikely, however, since business interests rarely recognize these types of small-scale land claims. By contrast, Sok and his household have struggled to diversify into nonfishing activities within the village. The good news, for this household, is that it is now in a phase of benefitting from two children having completed their schooling (grade nine in this case). Sok’s eldest son is working in a factory near Phnom
Penh and is able to send back some money each month; the other son now fishes with Sok.

The livelihood trajectories of the two households that no longer live in the village also warrant further discussion. Milorn’s livelihood took off during the resource exploitation phase of Koh Sralao: she owned several charcoal kilns and employed labourers to run these kilns. All her charcoal kilns were destroyed in 1999 as part of a government crackdown on illegal production. She tried to become a moneylender for those switching to crab fishing, but found that it was too difficult to ensure loan repayment once there were hints of fisheries declines. She then turned to making small sweets that she sold door-to-door, and other activities like raising pigs and renting out the basement of her house to gamblers. As she has lived in the area for a relatively long time, she is able to use her networks to access opportunities. For example, in 2004 a local businessperson sold her equipment for distilling rice wine. Milorn’s idea was to sell the rice wine and use the waste from this process as food for her pigs. This worked for several years until she decided that it was too much work for her to do this on her own. At that point she sold off the business to another villager.

Overall, Milorn’s livelihood activities became increasingly less lucrative over the years. This may have been one of the factors that pushed her toward finding options outside the village. In 2006 Milorn left Koh Sralao for the first time in pursuit of other opportunities. She initially went to Thailand, where her son was employed as a fish worker. She kept house for him, but found it hard to sell goods from his home. She returned to Koh Sralao in 2007 where she tried selling water. The well that she had access to, however, was the muddiest well in the village, so villagers did not want this water pumped into their homes. Thus, when she heard about a land distribution project that the government was supporting in another province, she seized the opportunity. According to her daughter, she was given a
piece of land that she farms with one of her grandchildren. Her daughter still lives in the village, using her mother’s home and continuing to rent out the basement for gamblers to play cards.

Milorn’s livelihood history is different from Dom’s, in the sense that she has been able continually to find new opportunities and make some money whereas Dom has had more of a boom-bust livelihood history. In the 1990s Dom fished for the then abundant and valuable grouper fish, saving enough money to become a middleperson for both crab fishers in the village and for those harvesting and selling logs. Dom became involved in transporting logs in the late 1990s from the upland forest areas through the mangrove estuaries to Koh Kong provincial town. To do so, Dom estimates he was forced to bribe the police a total of US$ 1,800 over a five-year period. At a certain point, however, there was a crackdown on this type of activity and Dom’s logs were confiscated by the police. This confiscation, coupled with many villagers not repaying Dom the money that they had borrowed from him, sent his household into a downward livelihood spiral starting in 1999.

Dom then turned to crab fishing as his main livelihood activity, but sought to supplement this with other activities; some of these initially appeared to be successful, although none were ever sustained. For example, Dom began operating a karaoke shop from his home and sold homemade dog-meat soup. Although dog meat is considered a delicacy, Khmer culture frowns upon the killing of dogs. After the novelty wore off and people stopped coming to sample his soup, the business petered out and Dom was forced to reconsider his options. A few years later, Dom decided he was too old to fish. In 2005 he left the village to help a businessperson secure a claim on a piece of land he was planning to develop near the provincial town. Dom and his wife pieced together a thatched hut with a small garden area. This semi-rural existence lasted for nearly two years until the owner began developing the land and Dom
was forced to move. In my last visit to Koh Sralao in 2010, villagers reported that Dom had obtained 2 ha of farmland in one of Cambodia’s border provinces, that his daughter had followed him there and that he had recently become the village chief. Dom’s house in Koh Sralao has long since been reclaimed, since he owed a significant amount of money to several moneylenders.

THE VILLAGE PERSPECTIVE

What the foregoing account suggests is that life for villagers is in constant flux. Although household wealth does shape the choice of livelihood activities that are pursued, as is seen between Sovanna’s livelihood choices (moving between activities, settling on nonfishing activities) as compared with Sok’s choices (remaining reliant on fishing), and can serve as a buffer against everyday stresses, life nonetheless remains challenging for most villagers in Koh Sralao. The following section provides an analysis of general stresses endured by Koh Sralao villagers over the past twelve years, and then considers the livelihood activities that villagers have pursued, based on wealth category, during this period. This analysis demonstrates how most villagers have been switching between livelihood activities at a furious pace and how few villagers can really “make it” in a situation of ever-continuing resource declines.

Ongoing Stresses

Livelihood stress has been rather constant for Koh Sralao villagers. Table IV illustrates the continuous instabilities facing villagers throughout the twelve years from 1998 to 2010.

As Table IV illustrates, people have endured a lot over this period. Koh Sralao households have been impacted by overfishing and a lack of livelihood options for years. Resource
extraction opportunities for the local population ended, for the most part, by the late 1990s. As land-based livelihood activities such as forest exploitation were significantly curtailed, villagers were forced to concentrate their livelihood activities in the fisheries sector.\textsuperscript{11} Meanwhile, the increase in foreign fleets has forced fishers using trawls to move into the inshore areas. It is

\begin{table}[]
\centering
\caption{Stresses Experienced by Villagers, 1998–2010} 
\begin{tabular}{|l|p{0.7\textwidth}|}
\hline
Stress & Explanation \\
\hline
Sand Mining, 2008– & Significant sand is being mined from river mouths. Affects crab populations and people’s ability to fish in the area; by mid-2010 nearly 60 (of 300) households had left the village. \\
\hline
Food Crisis/Economic Crisis, 2008– & Price of rice, fruit and vegetables doubled; price of gas increased. \\
\hline
Competition within Main Fishing Grounds, 2000s & Fishers squeezed into one area, meaning fishers using traps and nets are competing with fishers using trawls. Conflict ensues. \\
\hline
Loss of Fishing Gear, 2000s & Stolen or destroyed fishing gear (traps and gill nets) presents a challenge for households. Authorities hesitant to get involved. \\
\hline
Declining Resources, 2000s & Progressive decline in wildlife and fish populations, along with habitat degradation. Limited enforcement of existing laws. \\
\hline
Being at the Mercy of Markets, 2000s & Market demands and fluctuating commodity prices; boom-bust marketing cycles. No one to buy a product (sell-while-you-can mentality). \\
\hline
Charcoal Ban, 1999 & Forced more people into crab fishing or to leave the area. This shifted pressure from one resource to another (mangroves to fish). \\
\hline
Open Access Regime for Resources, late 1980s–1990s & Lawlessness pervades—fend for yourself and take advantage of resource extraction opportunities. In spite of major legislative reforms supporting community-based resource management, this attitude stemming from this era, to a large extent, remains. \\
\hline
\end{tabular}
\end{table}

\textsuperscript{11} Throughout the 2000s, over three-quarters of Koh Sralao’s three hundred or so households have practiced fishing or some form of fishing-related activity, catching mainly shrimp and two crab species (the swimming crab and the mangrove mud crab). Debt levels tend
no wonder that conflicts have escalated in recent years between those using different gear types in the same fishing grounds. Those that are able to combine fishing with nonfishing activities do so to ensure a suite of livelihood options. Compounding this situation is minimal access to land and the distance between villages: villages are between five to ten kilometres apart, meaning that boat travel is costly and not particularly time-efficient.

The most recent challenge facing fishers comes from sand mining activities that began in early 2008, when a few companies began dredging operations near one of the main fishing grounds used by Koh Sralao villagers. Within weeks, villagers noticed a decline in the main crab species caught in the area, the swimming crab. Fishers suspected a link between the rapid stock declines and the sand dredging. Although Koh Sralao’s resource management committee sent an official letter of complaint to the provincial government and the Ministry of Environment, no government authority has been willing to address this. This is likely linked to who is pursuing sand mining: the two main operators are two of Cambodia’s richest business entrepreneurs, both of whom happen to hold seats in the National Assembly and are rumoured to have strong connections with the prime minister (Global Witness 2009; 2010).

Sand mining is linked to regional markets, regulations and interests. Although Cambodia is developing its extractive industries sector, the recent interest in coastal sand from southwestern Cambodia is linked with Singapore’s land reclamation and construction projects and the Indonesian ban on sand exportation in 2007. Following the Indonesian ban, Cambodia—with its loose regulatory framework and relatively pristine coastal environment—became an area of interest for foreign dredging.

to be high, which is the case in many fishing villages, since fishers often need to borrow money at the beginning of a fishing season to cover their start-up costs (replacing mesh, fixing nets, boat repairs). For example, in 2003, eighty-two percent of households said they held debt; in a 2008 follow-up survey, ninety percent of households said they held debt.
companies (Sokha and Strangio 2009). Although it is difficult to assess the exact ecological impact of the sand mining, since there is no scientific baseline from which to measure, villagers believe that fishing has become even more difficult in the past two years. Empty homes are now seen throughout the village. This is the first time that I have seen this in the entire time that I have been working in this area. Villagers estimate that at least one-sixth of all households left the village between 2009 and 2010. Considering that the total population of Koh Sralao remained stable for the past decade at around three hundred households, this out-migration is significant. It appears that some households left to pursue farming opportunities elsewhere, while others fled particularly high debt loads and were unable to handle the shock of considerable crab declines. Sand extraction is not the only activity to place a strain on local livelihoods; it may just have been the tipping point for some households.

To survive in Koh Sralao, households need continuously to take advantage of the livelihood opportunities that present themselves. That being said, not all households can take advantage of the same opportunities, especially poorer households. How, then, do livelihood opportunities break down over the past decade vis-à-vis wealth categories in a place like Koh Sralao? Wealth, of course, is a relative concept in a village such as Koh Sralao, with few households being able to save much money and few households being able to move between wealth categories. The broad categories of rich, medium and poor did not look particularly different between 1998 and 2010, with most Koh Sralao households continuing to identify themselves in the medium category. What did differ, however, was the type of livelihood activities that people could pursue.

12 According to local perceptions, poor families have limited fishing gear or are forced to sell their labour, medium families have a boat, several types of fishing gear and can access credit (a range of debt occurs in this category) and rich villagers appear to have specialized business opportunities.
Table V breaks down livelihood activities by wealth category. Livelihood activities that are stroked out no longer exist, activities written in normal font have been continuous throughout the years and activities that have emerged in the past few years are italicized.

Table V draws attention to just how dynamic life is in Koh Sralao, and the multiple livelihood activities that households have pursued, continue to pursue or may try to pursue over time. At first glance it appears that poorer households, or those at the bottom end of the medium scale, are really struggling. This is likely true. They definitely have less livelihood options available to them. However, when thinking about fishing activities and livelihood security, another interesting point emerges. Poorer households tend to fish in the mangrove-estuary areas in and around the village, whereas medium households fish further

<table>
<thead>
<tr>
<th>Rich HH Activities</th>
<th>Medium HH Activities</th>
<th>Poor HH Activities</th>
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<tbody>
<tr>
<td>Specialized fishing activities</td>
<td>Charcoal producer</td>
<td>Collect mangrove wood</td>
</tr>
<tr>
<td>Access land (in village; in other areas)</td>
<td>Green mussel culture</td>
<td>Fish in estuary areas (traps)</td>
</tr>
<tr>
<td>Large HH shops</td>
<td>Collecting mushrooms from mangroves</td>
<td>Peel crabs</td>
</tr>
<tr>
<td>Control services (water, electricity)</td>
<td>Fish in Chrous Pros Bay (gill nets)</td>
<td>Sell sweets/cakes</td>
</tr>
<tr>
<td>Farm intensively</td>
<td>Skilled trade (hairdresser, carpenter)</td>
<td>Sell labour (fishing, nonfishing)</td>
</tr>
<tr>
<td>Control a service (water supply, electricity, water taxi)</td>
<td>Teacher</td>
<td>Collect molluscs</td>
</tr>
<tr>
<td>Lend money actively</td>
<td>Animal-raising</td>
<td></td>
</tr>
<tr>
<td>Lend a little money</td>
<td>Specialized fishing activities</td>
<td></td>
</tr>
<tr>
<td>Transport goods/people to provincial town</td>
<td>Small HH shops</td>
<td></td>
</tr>
<tr>
<td>Have a share in a key service (water, electricity, water taxi)</td>
<td>Have a share in a key service (water, electricity, water taxi)</td>
<td></td>
</tr>
<tr>
<td>Claim small amount of land far from village</td>
<td>Claim small amount of land far from village</td>
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**Table V:** Suite of Livelihood Activities, 1998–2010

*Italics:* 2007–2010 activities; *stroked out:* activities that no longer exist; *regular font:* activities that have been constant.
away from the village (accumulating debt to do so). Sand mining appears to be impacting fishers fishing in open waters to a greater extent than those fishing in and around the mangrove estuaries. Thus, given the significant debt loads that medium fishers carry, they are quite stressed and stretched. I do not want to suggest that poorer households are not struggling, for they are, but merely to point out that life for medium households is not easy either. Whereas middle-income earners are facing unanticipated risks and struggles in relation to intensifying their fishing effort, rich households have been able to switch their livelihood activities with relatively little risk. They have been able to diversify into nonfishing-related activities, and for many years did a mix of fishing and nonfishing activities. The difference is that in 2010 they are relatively uninvolved in fishing activities.

**LIVELIHOOD PATHWAYS AND RESOURCE DECLINE**

In spite of wealth differences, a striking feature of this study is how marginalization and immiseration is the norm for villagers in Koh Sralao. Only a few villagers have really “made it”: those that switched to nonfishing activities prior to the beginning of sand dredging activities. Villagers have constantly struggled to improve their situation and to find ways to sustain their livelihood. Yet sustaining local livelihoods has become a near impossible task since villagers have been increasingly marginalized in terms of access to the most productive resources in the area. Outside interests in local resources serves to further enhance people’s marginalization. Villagers are no longer involved in the small-scale extraction of the more lucrative resources: logging, charcoal production, sand mining or catching larger fish. If all these natural resources were truly protected (the village lies in one of Cambodia’s twenty-three protected areas) and outside entrepreneurs were not coming into the area, then
villagers might have had the benefit of an increased supply of fish, wildlife and non-timber forest products. This, however, has not been the case.

Moreover, this mangrove-estuary area does not have the means of production that would provide villagers with a more stable livelihood such as access to farmland, a well-regulated fishery or reliable wage labour opportunities in the area. The lack of road access combined with high gas prices and a declining fishery may prove to be a serious issue in the future. Although a few wealthy households can invest in their children’s education, this is not an option available for most households. Extra household labour enables a household to increase their fishing effort; this also means that children are faced with difficult decisions in terms of continuing their education, looking for work outside the village or helping their parents with fishing activities. By all accounts, those households that left in the past year did so because they could not sustain their lives in the area. Migration may in fact become the exit strategy for many fishing households. The question is where do people go and are they able to “make it,” whether in Cambodia or elsewhere? Meanwhile, those that stay are the wealthy few, those uninterested in moving and those who do not see any other options available to them. This is a village that seems to be reaching a breaking point.

CONCLUSION
Business entrepreneurs have always found ways to exploit the natural resources found in southwestern Cambodia—through growing marijuana, logging, charcoal production or dynamite fishing. However, the relative isolation and access challenges to this region meant that for many years local people were employed as labourers in such extraction activities or sometimes owned small businesses themselves. Even though
resource extraction did affect the ecosystem in a negative way, particularly the significant amounts of deforestation that took place, there were a range of livelihood options for local people to consider. As resource extraction opportunities began to diminish and as the government began enforcing certain rules and regulations, villagers who stayed in this area recognized that forms of resource governance were likely necessary if they were to sustain their livelihoods, and the livelihoods of their children (Marschke 2005). In a sense, the chaos and resource declines experienced in the 1990s are part of why people bought into the idea of pursuing forms of resource governance. In the late 1990s, fish stocks were already in decline, but there was a belief that aquatic stocks could be better managed at a local level along with implementing an active reforestation program (PMCR 2008). Large-scale resource extraction that excluded all villagers and seriously affected aquatic stocks was not fathomable back then. Perhaps this was a good thing.

Hindsight might lead one to question the benefits of putting a large amount of effort into local resource governance, particularly since villagers and technical departments have not been able to halt sand mining practices. In spite of this setback, Chapter 4 will illustrate how Koh Sralao villagers have not been passive actors in this story. Resource governance work in Koh Sralao began at a particular point in time, one where people thought that their work could make a difference—and for certain issues it has. Villagers were interested in “doing something,” particularly when it came to protecting mangrove forests, wildlife and aquatic habitats, and preventing illegal trawling or blast fishing. This willingness, combined with a donor agenda that promoted the idea of involving local people in all types of governance issues, created a platform for experimentation. Chapter 4 explores the results of such experimentation, examining the ebbs and flows of the work of Koh Sralao’s resource management committee between 1998 and 2010.