8. The Economy of Marine Tenure: The Clove Season Incident

The introduction and integration of the market economy into local communities is often identified as one of the causes of the breakdown of traditional sea management practise. For example, Johannes (1978, 1981) observed that the cash economy introduced by Westerners had degraded traditional marine tenure in Oceania. He argued that the introduction of a market economy encouraged competition for cash which led to increased exploitation of marine resources through the adoption of more effective and efficient fishing technologies and techniques. ‘Under such conditions’, Johannes (1978: 357) wrote, ‘a conservation ethic cannot thrive. Conservation customs practiced voluntarily by the individual erode first’. He notes that ‘the most widespread and most important single marine conservation measure employed in Oceania, and the most important, was reef and lagoon tenure’ (Johannes 1978: 350).

Hviding proposes an alternative argument. He suggests that:

Even where a fairly open access to fishery resources seems to be the rule, the commercialisation and intensification of marine exploitation may lead to a sudden upsurge of a multitude of ideas about customary boundaries and fishing rights—seemingly from nowhere. Hviding (1989: 5–6)

This argument looks at marine tenure as a response to the commercialisation of fishing activities that is usually associated with the adoption of a more advanced and efficient technology. We might say that this is another version of Polunin’s (1984) theory, which suggests that the absence of marine tenure might be attributed to the economic insignificance of the resources, creating no incentive for investment. When the market ‘informs’ people of the value of the resources, boundaries are drawn and claims are laid down so people can exclude others from gaining benefits from their territory.

Discussions of marine tenure in Maluku provide some support for the first theory. For example, Bailey and Zerner (1992) and Nikijuluw (1994), argue that the commercial economy, represented by commercial marketing, fishing companies, and the adoption of advanced technologies, has marginalised the practice of traditional marine resource management in Maluku. They suggest that trade and government promotion of exports have forced villagers to shorten the traditional closed season, allowing people to fish and harvest other resources more often. They also argue that private entrepreneurs have taken control of people’s resources and territory through rental arrangements or by
entering and extracting resources from people’s territory. The villagers were observed to accept this situation because they became economically dependent and politically powerless.

This chapter will discuss the relationship between commercialisation and marine tenure in the Kei Islands. It will focus on the influence of international trade in frozen anchovy. The discussion will develop by analysing conflicts in Dullah Laut over sea territory. In particular, I will discuss a conflict between Dullah Laut villagers and Ut and Selayar villagers. The conflict was triggered by the operation of a lift net\(^1\) by Ut and Selayar villagers in Dullah Laut territory.

The conclusion I have reached on marine tenure relates more to that of Hviding than to others who have written about marine tenure in Maluku. While I disagree that marine tenure emerges ‘seemingly from nowhere’, I argue that the international market in fishery resources has prompted people to strengthen their existing traditional marine tenure practices. Traditional boundaries have been emphasised and the principles of communal marine tenure have been reinforced. Since traditional marine tenure is a contested practice, the international market and the strengthening of customary marine tenure have created conflicts within and between community members as well as outsiders fishing in the territory.

The ‘Clove Season’ Incident

The ‘clove harvesting season’ (\textit{musim cengkiih}) in Dullah Laut is unique. It confused me the first time an informant told me about it. In its common understanding, the term does not only refer to the presence of clove trees but also an abundance of cloves. People would not use the term season (\textit{musim}) in relation to something that was only small in number. Yet, I had never seen even a single clove tree during months of fieldwork. When my informant told me that the cloves in Dullah Laut did not grow on the land but swam in the sea, I started thinking that this must be a metaphor. Finally, he explained, ‘We are not talking about the clove spice; this clove is trevally (\textit{Carangoides spp., bobara})’ (see Plate 8-1). He explained that every year, thousands of trevally—marine fish—make their way into Dullah Laut sea territory. When there are so many in number, they are easily caught and money is easy to earn. Even for those who fish for fun, this is a particularly joyful time (see Plate 8-3). For most fishermen, the fun

\(^1\) A lift net is a floating rectangular structure equipped with a net that can be sunk into the water and then lifted using a rolling device. Its four corners are anchored in order to immobilise the structure. When the fisherman wants to move the lift net to another fishing spot, he will take the anchors out of the water and use a boat to tow the lift net. When operating, lift nets use lights (carosene lamp or mini electric generator) to attract a school of fish which are then trapped in the net once the net is lifted (see Plate 8-2).
of fishing for trevally is the best fishing experience they have all year. Therefore, he concluded, the trevally fishing season was a time of high excitement, like the excitement of the Ambonese and people in other parts of Maluku when they harvest the clove spice.

I had been waiting to experience this excitement when finally the ‘clove’ were ripe. I was at the fish market in Tual when a villager told me that the trevally had ‘played’ in Dullah Laut sea territory. That day, I bought new fishing equipment and prepared a boat with my friend and the Dullah Laut Village head. We also asked another friend to join us so that we could share the cost of the fuel. The village head and I went back to the village to get more detailed information on the location of the ‘clove season’. That evening, the village head together with some other villagers, told me about their past experiences of trevally fishing. The trevally’s large size and the shallow water where they congregate make it very hard to land the fish. They jokingly expressed their doubts that I would be able to successfully pull the fish up into the boat.

Plate 8-1: The harvest of musim cengkik or clove harvesting for trevally, the Bobara (*Carangoides* spp).

Source: Author’s photograph.
Plate 8-2: The Bagan (lift net).
Source: Author’s photograph.

Plate 8-3: The joy of *musim cengkih*, fishing for trevally.
Source: Author’s photograph.
Finally, I got the chance to be involved in the fishermen’s joy of the ‘clove season.’ The village head and some of my friends collected me at about five in the morning the next day. It took us about 15 minutes to reach the fishing site at Wada Iyuwahan. The sea was very calm when we arrived at the location. I saw about 50 boats of various sizes on the fishing ground. People—one or two in small boats and up to five in bigger boats—were ready with their fishing lines. Everyone was talking and shared jokes while waiting for the fish to take the bait—‘meal time’ according to local expression. As the sun rose, thousands of trevally came into view at approximately three to five fathoms depth. Although no one had yet caught any fish, I already felt the excitement and the others shared that same feeling.

At around six in the morning, the trevally began to take the bait. People screamed excitedly as the fish pulled on their lines. Within minutes, I observed that almost all of the fishermen had a turn pulling a fish out of the water. Looking at how they pulled on their lines, I believed what the village head had said about the fishing being a real challenge. The fishermen had to pull hard on their lines and many were forced to loosen their lines as the fish ran in the opposite direction. There was considerable chaos as lines became tangled in fishermen’s hands or with other fishing lines. When I saw the fish hauled aboard the boats, I had to acknowledge that the village head had not exaggerated about their size.

This was a big day for everyone. By about eight in the morning, a middleman from Dullah Laut had already collected approximately 300 fish, worth almost a million rupiah. Around midday, he had collected a similar number again and then took them to the fish market in Tual. At two in the afternoon, he made a third trip selling the fish to the market. Thus, the fishermen shared a total catch worth around three million rupiah in that single day. The middleman got approximately Rp500 000–750 000 profit from his sale of the fish in Tual. The village leader, myself, and two friends in our boat caught 40 fish which netted us Rp120 000, enough to cover the cost of fuel, lunch, and some boxes of cigarettes for that day and the day after. We went back home around four in the afternoon with an agreement to fish again the following day.

The second day of the ‘clove season’ was disturbed by the presence of a lift net. People complained that this lift net would catch all the anchovy which people believed was the reason for the trevally’s presence. This concern was reasonable since people had seen the lift net catch tons of anchovy in one day based on the activities of a speedboat that transported the anchovy from the lift net to the fishing company’s ship. On that day, their speedboat made five trips, each
time with a load of approximately 700 kilograms.\(^2\) The village head took direct action. He sent his uncle to ask the lift net fishermen to move their lift net from the current location.

On the third day, the conflict escalated. There were three additional lift nets in the area. Although still abundant, the fish did not take the bait causing the fishermen’s catch to decrease significantly. Expressing their anger, some of them threatened to cut the lift net anchors. Some others accused the village head of taking bribes from the lift net fishermen because he did not do anything to get rid of them. This claim was addressed by the village head’s uncle who had warned the lift net workers the day before. When the village head arrived, he also proved that he did not support the lift net owner. He ordered people to cut the anchors of all of the lift nets. However, as he finished speaking, a fisherman from Ut Island replied by saying, ‘Those who cut the anchor, his neck will be cut too’. A fisherman who was a descendant of the war commander replied, ‘Let’s go to land and see who cuts whose neck’.

Apart from the fact that the lift net operations disturbed the clove season, Dullah Laut villagers considered the lift net fishermen’s presence illegal because the lift nets were cast without the consent of the village head. This meant that the lift net owners had violated customary marine tenure which requires that those who wish to fish for commercial purpose should seek permission from the owner of the territory. They also suspected that the people of Ut Island were claiming ownership over the location where the lifts net were operating. The threat made by a fisherman from Ut Island marked his association with the lift net owners. From this, people suspected that the Ut villagers had granted the lift net owners the right to fish in the fishing spot and based on the rule of customary marine tenure, this meant that the people of Ut Island were claiming ownership of the territory. This suspicion was proven true when Mr H (the brother of the Ut fisherman) met the Dullah Laut Village head who was fishing with the son of the former Dullah Laut Roman Catholic village head. He told the village head that it was the leaders of Ut Village who had allowed the lift net fishermen to set their lift nets in that location. In addition, he mentioned that the territory where the lift nets operated—called Metan Er—was their territory. In support for his claim, Mr H chanted a customary song mentioning his ancestors’ involvement in the Papuan War (see Chapter Four). Mr H said that the ‘three houses’ (Rahan Itel) consisting of Yamko, Henan, and Rahaded fam of Dullah Laut village, had given Metan Er to his ancestors as a sign of gratitude for their help in the war.

Responding to the claim, the Dullah Laut Village head said that he was not opposed to the operation of the lift net fishermen in that area because he

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\(^2\) This estimate was based on the number of plastic boxes containing anchovy. Each box contained approximately 100 kilograms and the speedboat transported seven boxes on each trip.
understood that the money paid by the fishermen would be used for the construction of a mosque on Ut Island. However, the village head said that the Ut Island people should have informed him, since the lift nets operated in Dullah Laut village territory. This was the basis of his objection to the claim. He also stated that the name of the location was not Metan Er but Wada Iyuwahan. The son of the former Dullah Laut Roman Catholic village head supported this: ‘It is true that people of Ut Island have helped our ancestors in the Papuan War but they were only given use right over mangrove trees on Baer and Ohoimas islands’. Mr H took exception to this point. He insisted that his version of the ‘history’ was correct version. The Dullah Laut village head finally told Mr H to come to Dullah Laut Village and solve the matter before a customary court of the origin fam (Ohoiroa Fauur). Mr H left our boat without saying a word in response.

The following day the conflict became even more serious. Contrary to the villager’s request, the lift net fishermen kept fishing and brought in even more lift nets. On the fourth day, five additional lift nets were towed to the location and the Dullah Laut village head received a letter signed by Mr Dullah Rumagiar (Mr H’s brother) on behalf of the Ut Island leaders which raised two points: first, was that the people of Ut had allowed the lift net fishermen to operate in Metan Er, the location of the trevally; and second, they re-stated their claim to possess Metan Er based on the narrative Mr H had uttered to the village head. For Dullah Laut villagers this was a challenge of war because they believed that defending their territory and family members were the most important obligations for which they would sacrifice their wealth, slaves, or even lives if necessary.

In response to this matter, the village head held two customary meetings, one at the Christian settlement and another at the Muslim settlement. Except for Mr A. Rahaded (see Chapter Six), all representatives of origin fam in both settlements participated in the meetings. Both meetings discussed the nature of the problem and strategies to deal with it including evaluating the narrative of origin that explained the relationship between the people from Dullah Laut and from Ut Island. In this regard, all agreed that there was only one version of the origin narrative—the one that was told by the son of the former Dullah Laut Roman Catholic village head. They also concluded that the location of the ‘clove season’ was Wada Iyuwahan and not Metan Er. They decided to meet the lift net fishermen out at sea on their lift nets and ask them to leave. The lift net fishermen would be given one day to comply with the demand. It was also
decided that the village head would prepare a letter rejecting the claim of the Ut Island people. The letter would be directed to the top leader of Ut Island, the Kings Baldu\(^3\) and Tufle,\(^4\) and government officials at the subdistrict level.

On the day agreed to raid the lift net fishermen, some guests visited the village head early that morning. The first guest was the owner of a fishing company that bought anchovy from the lift net fishermen, and her brother and nephew. They confessed that their ship had towed five of the lift nets but that their company did not own them. They said that their ship had towed the lift nets only because their company bought the anchovy they caught. According to these guests, they had nothing to do with the operation of the lift nets in Dullah Laut territory. However, they asked the village head not to harm the lift net fishermen.

The second guest was Mr O, a Dullah Laut villager with a Butonese father. The aim of his visit was to convey a message from his fellow Butonese, the father of the first lift net owner. According to Mr O, the Butonese fellow had apologised for what had happened and had planned to meet with the village head to ask permission to set his lift net in Dullah Laut sea territory, but his visit was postponed because his brother passed away. Meanwhile, his son had brought his lift net to Ut Island in order to get closer to Dullah Laut where he wanted to fish and his son’s wife’s father, one the leaders of Ut Island, told his son that it was all right to set the lift net in place. In fact, it was his son’s father-in-law who had towed the lift net in place. Mr O also added that the owners of the other lift nets were fishermen from the same village as the first lift net owner and were financed by an anchovy exporter.

The visits of these guests brought about a new understanding of what had happened. It became clear that the operation of lift netting in the ‘clove season’ location was the idea of an Ut Island villager, not all of the leaders in the village or the head of the village. Initially, the ‘permission’ applied only to his son-in-law. The other lift net fishermen just followed their fellow villager to operate in the same location. It was not clear whether they had spoken to the father-in-law of the first lift net owner or not. However, it was clear that the fishing company was directly involved in this incident as admitted by the fishing company owner, who said their ship had towed the lift nets.

This new understanding did not alter people’s plan to raid the lift nets that day. At eleven in the morning, just after the Christian villagers had finished their Sunday prayer, around 20 villagers led by some origin fam leaders went to the lift net’s location. They met the fishermen and told them they had one day to take their lift nets away. If they had not observed this request by the next

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\(^3\) Baldu is the king of Utan Til Warat domain to which Dullah Laut is attached.

\(^4\) Tufle is the king of Tual domain to which Ut Island is attached.
day, they were told that no one would be responsible if something happened to them. This was clearly a threat that people would harm the fishermen or their lift nets if they did not comply.

The raiders had predicted that they would meet some resistance from the fishermen and brought knives and other weapons with them for protection. Even though there were now 11 lift nets operating and the owners and workers outnumbered the raiders, they did not argue with or confront the raiders physically. They accepted the request and promised to move their lift nets out of the territory that day.

The Economy of Village-Based Fishing

In examining the ‘clove season’ raiding incident and other conflicts pertaining to the Dullah Laut sea territories, my belief is that fishing competition between villagers and outsiders is one of the main issues that has triggered conflict. This is a complex issue which involves not only who can fish in a particular sea territory, but also the level of acceptable exploitation which is closely related to fishing technology and access to marketing. The following will outline the economics of fishing activities conducted by Dullah Laut villagers and outsiders.

Dullah Laut villagers mainly used four types of fishing technologies: fish pot, stake trap, line, and gillnet. (See Plate 8-4) The fish pot, stake trap, and line methods of fishing are considered the ‘real’ traditional fishing technologies still in use. Their use may be as old as the community itself or at least several generations. Gillnets is a relatively new method and was first used in the late-1970s coinciding with the introduction of outboard engines.

Although some villagers—such as net owners and the elderly—used only a particular fishing technology, most fishermen in Dullah Laut used two or more types of fishing gear. It was not unusual for villagers to retrieve their fish pots in the morning and go line fishing at night. Some villagers even used three fishing technologies in the space of 24 hours. In the morning they would dive to collect their catch in the stake traps and fish pots and send them to the fish market in Tual, or sell them to a middleman in the village. During the daytime, they would prepare their fish pots to set out in the afternoon before line fishing at night.

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5 A detailed account on the economy of fishing is presented in Appendix 1.
6 Bubu (fuf) is a box-like fish trap made from bamboo. Stake trap (fean) is a fence-like fish trap, also made mainly from bamboo. The lift net is a rectangular floating device equipped with a net that is lifted when the target fish have schooled on top of it. Pressure lamps onboard the boat are used to attract fish to gather above the net.
Plate 8-4: Two fisherman prepare the bubu, or fish traps.
Source: Author’s photograph.

Investment and Income

In terms of costs, traditional fishing technologies only require a relatively small investment. The net technology has a considerably higher initial capital cost for the net and boat because the boat is not only used for fishing activities but for other purposes as well, such as transportation. Typically, a fisherman could go to sea with only Rp5000 for buying some line or other fishing requirements. For a fish pot fisherman, about Rp60 000 buys 15 fish pots, the minimal number for a proper operation. For stake trap fishing, a fisherman would need about Rp250 000 to have a stake trap ready for operation. In comparison, a gillnet fisherman told me that he bought an outboard engine for Rp2.6m in 1986 that he used for net fishing. Needless to say, several hundred thousand more were required for the net and a bigger boat to service the new outboard engine.

I observed at least five ways fishermen obtained capital for their fishing activities. The first was from operating their own fishing business or selling agricultural products. The second was from borrowing the money from a village middleman to whom they sold their catch. They usually agreed that the loan repayments would be deducted from the price of their catch. This kind of arrangement was not strict in terms of the level of repayments or the period of the debt. The third way was to form a group in which one of the members provided the money to buy the fishing gear while others contributed their labour to operate
the business. The fourth was to obtain a gift or a loan in the form of money or fishing gear from non-business connections such as relatives or friends. The fifth way occurred by buying fishing gear directly from a fishing gear store in the capital city of Southeastern Maluku District and establishing a mortgage system of repayment. Most of the money to pay for the gear would have come from sources within the community on Dullah Laut and only this scheme would involve non-villagers contributing to the investment.

In line with the investment, the overall income generated using the traditional fishing gear or gillnets was relatively low. Data collected on fishing catches revealed the following monthly net incomes of nine fishermen (see Table 8-1).

**Table 8-1: Monthly net income for Dullah Laut fishermen, 1996.**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Net monthly returns (Rp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish pot (fuf)</td>
<td>204 166 193 000</td>
</tr>
<tr>
<td>Stake trap (fean)</td>
<td>264 133</td>
</tr>
<tr>
<td>Line</td>
<td>267 583 283 833</td>
</tr>
<tr>
<td>Net (crew)</td>
<td>171 209 139 018</td>
</tr>
<tr>
<td>Net (owner)</td>
<td>659 178 330 564</td>
</tr>
</tbody>
</table>

Source: Calculated based on data presented in Appendix 1.

As shown in Table 8-1, the net monthly incomes ranged from Rp171 209 to Rp659 178. Except for the net owners, the income using any of the traditional fishing methods was similar. That said, the traditional technology providing an average income of around Rp230 000 is more lucrative than crewing for the gillnet owner.

**Fish Marketing**

All of the fish caught using the techniques described were sold locally. The first marketing method was to sell the catch directly to consumers in Dullah Laut, in other villages, or at a fish market. The second technique was to sell the catch to a middleman in the village or in the Tual fish market. A third was to sell the catch to a middleman in Dullah Laut Village who then sold them to another middleman in the fish market who sold them to consumers in the market. The second and third ways generated employment for six people in Dullah Laut and around 20 people at the fish market in Tual. The first not only sold the catch of Dullah Laut fishermen, but also the catch of fishermen from other villages. Figure 8-1 describes these marketing schemes.
The fish marketing business provided a living wage for about six to eight people in Dullah Laut Village. Most of them were middlemen in the Muslim settlement, and only two were from the Christian settlement. I recorded the net monthly income of four of these middlemen and their earnings to be: 172,383; 160,633; 245,750; and 936,569 rupiah per month. It seemed the significant differences in income between the first three and the fourth were caused by their way of acquiring and selling the fish. The first three fishermen ran their business in the same way—they bought the fish in Dullah Laut Village, and sent the fish by public sea transportation to the fish markets where they were sold. So, the quality and quantity of the fish they bought and sold was determined by the fishermen coming to the village from their fishing trips, and the departure time of the public sea transportation. The last middleman operated his business using a boat with an outboard engine. This technology made it possible to collect the fish from the fishermen while they were still out at sea. It also made it easy for him to send the fish to market any time he had enough fish to sell.

The Economy of Export Oriented Fishery

The discussion of export oriented fishery in Dullah Laut sea territory should cover both live reef fish and anchovy fisheries. However, since the former is not related to the clove season incident, I will only discuss anchovy fishing.

The anchovy export in the Kei Islands is associated with the use of lift net technology, which is the only technology suitable for catching anchovy. Lift net fishing has been popular since the 1980s and was created in 1964 when a fisherman in Sathean Village on Kei Kecil Island modified his mosquito net as a lift net. The net only lasted a couple of days and his fellow villagers protested about its use at the time (Adhuri 1993). It was not until 1983 that a second
8. The Economy of Marine Tenure: The Clove Season Incident

lift net was constructed and operated. Although it generated conflict amongst Satean villagers, they managed to resolve the conflict and continue using the lift net. When I did my field research, lift nets also operated in some other villages such as Selayar and Ngilngof on Kei Kecil Island.

It was only in 1995 that lift net fishing in the Kei Islands became connected to the international anchovy market when a Taiwanese businessman bought anchovy from local fishermen for export to Taiwan. His business started in Ambon in 1993 when, in collaboration with a fishery company in Jakarta, he brought two ships to Ambon and started buying and exporting anchovy. In 1995, he sent one of his ships to the Kei Islands because the supply from lift net fishing in Ambon was well below his export target.

When he began his business in the Kei Islands, he did not involve himself in fishing activities at all. He depended on supplies from the village-based lift net fishermen. However, when he realised that the resources were quite promising—and production still below his export demand target—he encouraged more fishermen to become involved in lift net fishing. In 1996, he adopted a loan scheme in which he loaned money to those who were interested in lift net fishing. In return, those who borrowed the money would sell the catch—particularly anchovy—to the company. Special arrangements for the selling price and the way in which the fishermen would pay back the company would be agreed upon by the company and the lender. There were some local businessmen who wanted to get into the anchovy business and some of them signed up to the loan scheme developed by the Taiwanese businessman as well. Other local businessmen constructed their own lift nets but asked local fishermen to operate the nets for them.

The capital needed in lift net fishing was higher than for all other technologies used in Dullah Laut except for gillnet fishing. From information I collected regarding 27 lift nets which were made and used in Sathean Village since 1983, I found that fishermen spent from Rp1–5.5m, and how much a fisherman spent depended on when he constructed the lift net and how big it was. The price of the lift net—including the net, planks, and nails—has increased over time. Of course the bigger the lift net, the more material needed and the more capital invested. In addition, extra capital was also needed for a boat to transport people and the catch between the lift net location and the village. The boat would cost a fisherman around Rp150 000 to Rp300 000. When I did my fieldwork, most of the fishermen equipped their boat with an outboard engine, requiring additional capital ranging from Rp750 000 to Rp2.5m.

There were several ways people got the money to construct and operate lift nets. The most important sources were savings from their previous work, borrowing from friends or moneylenders, and—a method that was becoming
the favourite—a ‘special’ loan scheme operated by the fishing company. It is
interesting that from the 22 fishermen I interviewed, there was only one who
succeeded in accumulating his capital from his previous fishing activities, in this
case gillnet fishing. There were another four fishermen who raised their capital
from a combination of net fishing, sailing, and trading. I believe this indicates
that fishing technologies before the lift net were not profitable enough to enable
fishermen to accumulate the funds needed to upgrade the technology they were
using. By contrast, borrowing from friends or money lenders was quite common
and among those I interviewed, there were about 11 fishermen who acquired
their capital in this way. Borrowing from friends was based on the close personal
relationship between the borrower and the lender and economic calculations
were not central to these arrangements. On the other hand, borrowing money
from a money lender was purely economic and interest was always charged.

The special loan schemes introduced by the fishing companies were becoming
popular when I did my fieldwork. The basic agreement involved in this scheme
was that the company provided the fishermen with an amount of money to
construct a lift net and if necessary, buy a boat and engine. In return, the
fishermen were obligated to sell the main target of lift net fishing—anchoy—to
the company. The company would deduct a certain amount from every purchase
from the fishermen to repay the debt. The motivation for this scheme was purely
economic; the company used the local fishermen to extract the resources and
secure a continuous supply of the fish. Unlike other schemes, it was the lender
(the fishing company) that actively looked for clients. Selection was based on
two considerations—the borrowers’ fishing ability and personal connections.
The first consideration was to ensure that the invested capital resulted in a
supply of fish. The second consideration sprang from the companies’ need for
people who could help them in handling paper work and dealing with local
fishing and exporting officials. Given the importance of these connections, the
chosen person was not necessarily a fisherman. However, whoever was chosen
would usually ask skilled fishermen to operate his lift net.

It was quite a surprise to learn that despite the higher investment, lift net
fishing did not generate higher income for its owner and operator compared
with simpler and cheaper technologies used by Dullah Laut villagers. I found
that the net monthly incomes of a fisherman working on two different lift nets
were Rp159 755 and Rp104 480. In fact, these incomes were even lower than
income from all other fishing technologies in Dullah Laut (see Table 8-1).

Marketing

Anchovy is a commodity that is sold both locally and exported. Regarding the
anchoy taken by the lift nets involved in the incident I described earlier, they
were all exported. In this particular context, there were three paths to getting the anchovy on the export market: direct marketing of the anchovy from the lift net owner to the exporting company; a marketing trough created by a small anchovy businessman who in turn would sell the fish to the exporting company; and another direct marketing from a local anchovy collector who also operated their own lift net and whose catch was sold directly to an export company.

The main export destination is Taiwan. As I mentioned earlier, the connection between lift net fishing and the international market was established in 1995 when a Taiwanese businessman started exporting anchovy to Taiwan from the Kei Islands. In that year, anchovy companies exported 370.5 tons with a total value of approximately Rp232.6m even though anchovy export businesses did not engage local middlemen.

The Political Economy of the Conflict

The clove season incident was triggered by the use of lift net fishing by non-Dullah Laut villagers who were provided the capital for their operation by a fishing company involved in buying and selling the catch to international markets (see Table 8-2). The lift nets were operated in Wada Iyuwahan, a territory belonging to Dullah Laut villagers who only used locally funded and relatively simple fishing technologies targeting locally marketed fish.

Table 8-2: Parties and issues relating to the conflict.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Owner</th>
<th>Capital</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village-based</td>
<td>Fish pot and trap, line and net</td>
<td>Dullah Laut villagers</td>
<td>Locally earned</td>
</tr>
<tr>
<td>Non village-based</td>
<td>Lift net</td>
<td>Kei Islanders except for Dullah Laut villagers</td>
<td>Locally earned as well as outside company</td>
</tr>
</tbody>
</table>

Source: Fieldwork research, 1996.

As with incidents I have discussed in other chapters, the ‘clove season’ incident involved multiple issues. However, I suggest that the main issues triggering this incident were economic and economic issues are an integral element of marine tenure.

The conflict between Dullah Laut and non-Dullah Laut fishermen came about through the adoption of new technology. Of course, this kind of conflict is not unique to the Kei Islands. In fact, conflict associated with the development of
fishing technology is not unusual in any fishery around the world. For example, Matsuda and Kaneda (1984) found that technological development had been a significant factor in six out of what they called ‘the seven greatest fisheries incidents in Japan’. Bavinck (2001) also found that using a trawler had caused serious conflict between the operator and fishermen using more traditional technologies who fished in the same fishing ground in India. In Indonesia, it was the bloody conflict between trawlers who operated in fishing grounds used by fishermen using smaller and much simpler technology, such as gill nets and small purse seine, that caused the Indonesian government to ban the use of trawlers in 1980 (Bailey 1986, 1997). I have also observed that technological developments created conflicts between fishermen in Bebalang Island, Demta, and Sathean villages in South Sulawesi, Irian Jaya, and Maluku respectively (Adhuri 1993).

There are two main questions that should be addressed when understanding how the conflicting economic interests between Dullah Laut fishermen and fishermen coming from outside gave rise to conflict. The first question is why were the outsiders driven to fish in Dullah Laut territory? The second question is why did Dullah Laut villagers object to the operation of lift nets and grouper fishermen in their territory? The following discussion will focus on answering these questions in particular.

A group of interrelating factors drove non-Dullah Laut fishermen to expand their fishing location outside of their territory and drew them to the Wada Iyuwahan fishing territory. The first factor was the spatial requirements of lift net technology. Although the actual size was no bigger than the stake trap, the operation of the lift net needed much more space because the light used in lift net operations attracts fish from a radius of 30–50 metres. Given this, it was assumed that the distance between operating lift nets should be around 60 meters. Therefore, as the number of lift nets increased, more fishing space was needed while the number of suitable fishing spots in their territory became limited.

The second factor was that the fish catch in the outsider’s territory had decreased due to the increasing number of lift nets operating in their territorial waters as well as seasonal change. The territorial expansion of operation was an attempt to avoid further deterioration of the catch for individual fishermen. The seasonal change referred to the fluctuation of the targeted fish as a result of changing weather. The number of anchovy was reduced during the west monsoon when their territory is subject to strong wind, which contributed to the fishermen being forced to operate their lift nets elsewhere.
A third factor was the abundance of anchovy, which traditionally signal the presence of the trevally, in Wada Iyuwahan. When the fishermen were informed that the clove season was located in Wada Iyuwahan, they treated it as an invitation to move their lift net operations.

These fishermen were local people who were well acquainted with the concept of communal marine tenure, which meant they were aware of the traditional procedures used to gain access to fishing spots in Dullah Laut village. For the first lift net owner, this could have been done by asking permission from the village head of Dullah Laut. However, when the first lift net owner found that his father-in-law claimed rights to the territory, he decided that such a request was unnecessary—a view corroborated by Mr H when he claimed ownership of Dullah Laut by recalling the narrative of the Papuan War.

The last factor was the result of ‘encouragement’ from the companies that provided the capital for the lift nets. The importance of this encouragement was that it outweighed the perceived risks of operating ‘illegally’. One such fishing company involved with the lift nets operated in Wada Iyuwahan. The scheme agreement was the same as it was in other areas—the fishermen were obliged to sell their catch to the company and the company would deduct the repayments from the purchase price. This scheme however, did not have a provision for fisherman to repay the loan if the operation of the lift net failed before the investment was fully repaid. As a result, the fishermen interpreted the company’s encouragement as a sign that the company would take responsibility for the risk faced by the fishermen. In this sense, there was nothing to lose for the fishermen. If the worst came to the worst, such as the destruction of their lift nets, it was not their fault but the fault of the company. It was also the company’s loss, not theirs. On the other hand, if they succeeded they got to benefit from the ‘illegal’ operations.

From the company’s point of view, the encouragement was necessary in order to maintain the continuity of fish supply so that they could meet the export demand and make a fast return on their investment. Of course it is likely that they took the risk of this encouragement into consideration since they were aware of the existence of traditional marine tenure practice. However, in their view the worst possible consequence would be eviction from Wada Iyuwahan (which was in fact, what eventually happened). More serious consequences such as physical abuse and lift net destruction—although perhaps ‘legal’ according to traditional practice—would be considered criminal acts under Indonesian law which would have made physical abuse or lift net destruction less likely and also opened the possibility for the company to sue Dullah Laut villagers for any damage caused to their equipment.
Now to answer the second question, which is why did the Dullah Laut villagers object to the operation of the lift nets in Wada Iyuwahan? Since the answer to this question lies in the practice of marine tenure, I would like to reiterate the basic tenure concepts. In Chapter Five, I described how the technology and level of exploitation defines the exclusivity of village sea territory. The question of who may make use of or own a territory involved two kinds of rights attached to the territory: use right and property right. It should be noted however, that the meaning of property right here does not mean ‘the absolute possession of all rights or almost all rights by a single party’ (Crocombe 1974: 8). In fact, the main difference between the use right and property right is the additional right to transfer the use right. This means that those who hold property rights on a territory are free to make use of the territory or extract available resources, and are also able to transfer their use right to other parties.

In Chapter Five, I also noted that property right and use right are held by particular social groups. In the case of Dullah Laut village, property right is the privilege of the origin group called Ohoiroa Fauur. Use right is held by those who have marriage connections with Ohoiroa Fauur members. Unless the property right holding unit grants permission, outsiders cannot extract resources from the territory. However, this exclusivity does not apply to outsiders if their level of exploitation is considered to be only for subsistence purposes and they have a good relationship with Dullah Laut villagers. The judgement on the latter was the privilege of the right holders of the territory.

Like the Morovo people in the Solomon Islands (Hviding 1989), the people of Dullah Laut have often said that everyone could fish in their sea territory as long as it was only for subsistence. How did the villagers of Dullah Laut make judgements about this ‘subsistence’ purpose? It is clear that ‘subsistence’ is not interpreted in a strict ‘hand to mouth’ sense. For example, fish pot, stake trap, and line fishing are all regarded as subsistence fishing technologies despite the fact that the catch is sold. Nor does the level of income appear to play an important role in defining subsistence operations. In fact, the data from the previous sections shows that the economic return for lift net owners tend to be lower than the return to those operating traditional technologies.

There are four factors that appear to be the most important when making judgements on whether a fishing operation is a subsistence operation or not. The first is the nature of the technology. Whereas the Morovo people consider technology to be separate to the issue of subsistence fishing, for Dullah Laut villagers it is a defining characteristic. The second factor involves an assessment of the level of exploitation. The third relates to the capital investment required, and the fourth concerns the nature of the market in which the catch is sold.

When I asked an informant why the lift net operation at Wada Iyuwahan triggered the incident, he referred to the first two of these factors: ‘Imagine! A lift net, at least 10-by-10 metres in size, catches tons of fish in one haul compared with line
fishing that only gets one fish in every catch. Is it comparable?’ Technically, lift
nets are bigger and their construction is more complex than local technologies
operated by the villagers. The technical complexity is obvious if we note that the
construction of a lift net requires a specialist while almost every fisherman can
prepare fish pot, stake trap, lines and nets. Dullah Laut villagers also consider
spears and locally made rubber ‘guns’ to be subsistence-oriented fishing gear.

Dullah Laut villagers considered lift nets to be much more exploitative than
the technologies they used. Actually, it is difficult to compare the exploitation
levels of lift net with the other fishing technologies because they target different
types of fish and sell them in different units. However, it seemed that people
measured the level of exploitation by comparing the maximum possible catch.
In this sense, lift nets were proven to be more exploitative than line fishing, as
demonstrated by the level of catch in the incident I described. Furthermore, the
operation of the lift net also disturbed line fishing because they caught the fish
that were in the water to attract the line fishermen’s’ target fish.

The capital investment required for lift net operations also supports the belief
that this type of fishing does not fall in the category of subsistence fishing.
Although in some cases net operations had larger investments, lift net operations
require a large initial investment whereas net fishing operations can be carried
out with the minimum size of net and gradually expanded. Lift net construction
requires complete construction at the commencement of the operation.

The issue of marketing is also taken into consideration when defining subsistence
activity. In this regard, fishing activities aimed at the local market as opposed
to regional or export markets are considered to be at the level of subsistence. In
this sense lift net fishing clearly fell into the non-subsistence category. In fact,
it was the companies involved in export marketing that started the operation
of lift nets in Dullah Laut territory. All but one of the lift nets—the first one,
owned by a Butonese—were capitalised by a fishing company that bought the
catch and exported it to Taiwan. This direct marketing from lift net fishermen to
the exporting agencies could also be seen as by-passing the chain of marketing
that supported local middlemen. Thus, from the point of view of the Dullah Laut
villagers, the lift net operation was not only ‘illegal’ in relation to their marine
tenure but also directly threatened the economy of their fishing activities.

Given that they were considered commercial operations, there were only
two possible scenarios under which the lift net operations could have been
permitted. If the lift net fishermen had use right over the territory, their activities
would have been allowed. But, both the owners and the operators of the lift
net were non-Dullah Laut villagers and they had no marriage connection with
_Ohoiroa Fauur_ members. Thus, they were excluded from any rights over the
territory. Their attempt to gain use rights through the Ut Island villagers was
also unsuccessful. This would only have been possible if the Ut villagers held property right over Wada Iyuwahan. In fact, this attempt led to an even more serious reaction from the Dullah Laut villagers. Mr A’s claim that the location of the clove season—he called the location Metan Er—was the property of the Ut villagers particularly offended some of the Ohoiroa Faur leaders. This claim was taken to be a challenge to the territorial sovereignty of the Dullah Laut villagers. Thus, the lift net operation not only questioned use right but, more seriously, challenged their property right over the territory. The latter was considered to be a declaration of war by some of the Ohoiroa Faur leaders and Dullah Laut villagers were prepared to enter into physical conflict with the Ut villagers. According to a traditional saying: ‘people are willing to die to defend the boundaries of their island and land’ (umat her mat utin nhu nuh tanat …).

The second scenario under which the operation could have been permitted was if the lift net owners had contacted Ohoiroa Faur representatives and asked them for permission to fish in their territory. Under this scenario, a leasing agreement which would allow the transfer of use right from the original right-holding unit to a second party could have been drafted. A contractual fee (ngasi) would be involved under such an agreement.

**Conclusion**

It is obvious that the clove season incident was brought about by the technological developments that had occurred in the Kei Islands. Ultimately, it was the international anchovy market that stimulated the fishing company to operate in Kei Islands, and it was for the sake of the market that these companies funded fishermen in order to develop a greater and more secure supply of fish.

Has technological development degraded the practice of marine tenure? My answer to this question is no. What the incidents shows us is the opposite. When the lift net was used by outsiders operating in Dullah Laut territory, the people of Dullah Laut strengthened their traditional marine tenure practices. They did it by recalling narratives of origin to remind all parties involved of the sea boundaries and to declare their exclusive rights to their sea territory. Customary meetings involving as many customary leaders as possible were held to confirm every possible version of the narrative of origin. Once they were certain of the answers, they stood firm and exercised the necessary action to uphold their tradition. Interestingly, customary marine principle was also used by Ut leaders to make the decision to disregard protocols and lay claim to Dullah Laut marine territory. Origin narrative was chanted to lay claim of ownership, or use right at the very least. Under these set of circumstances, conflict was the fruit.