Nicholson, D. (2001), 'Environmental litigation in Indonesia', Asian Pacific Journal of Environmental Law, 6(1): 47–78.

Numberi, Freddy (2008), 'Opening speech to the 30th Asian Pacific Fishery Commission (APFIC) main session', 11 August, available at http://www.dkp. go.id/index.php/ind/news/309/, accessed 12 September 2008.

- Palma, M.A. and M. Tsamenyi (2008), 'Case study on the impacts of illegal, unreported and unregulated (IUU) fishing in the Sulawesi Sea', paper prepared for the Asia Pacific Economic Cooperation Secretariat, April, available at http://www.apec.org/apec/publications/all_publications/fisheries_ working.html, accessed February 2009.
- Pet-Soede, L. and M. Erdmann (1998), 'An overview and comparison of destructive fishing practices in Indonesia', SPC Live Reef Fish Information Bulletin, 4: 28–36.
- Rahmadi, T. (2006), 'Towards integrated environmental law: Indonesian experiences so far and expectations of a future environmental management law', in M.G. Faure and N. Niessen (eds), *Environmental Law in Development: Lessons from the Indonesian Experience*, Edward Elgar Publishing, Cheltenham, pp. 128–81.
- Rangkuti, S.S. (2000), Hukum Lingkungan dan Kebijaksanaan Lingkungan Nasional [Environmental Law and National Environmental Policy], second edition, Airlangga University Press, Surabaya.
- Santosa, M.A. and K. Fjellstrom (1997), 'The Indonesian environmental management law 1997', Asian Pacific Journal of Environmental Law, 2(3–4): 366–72.
- Silalahi, M.D. (2001), Hukum Lingkungan dalam Sistem Penegakan Hukum Lingkungan Indonesia [Environmental Law and Law Enforcement in Indonesia], Penerbit Alumni, Bandung.
- Sodik, D.M. (2007), 'Combating illegal, unreported and unregulated fishing in Indonesian waters: the need for fisheries legislative reform', PhD thesis, University of Wollongong, Wollongong, available at www.library.uow.edu.au/ adt-NWU/public/adt-NWU20080905.114951/index.html.
- State Minister for the Environment (2006), State of Environment Report, Jakarta

State Minister for the Environment (2007), State of Environment Report, Jakarta.

- Stoink, F. (2006), 'Supervision and enforcement in the law concerning environmental management, Law No. 23 of 1997', in M.G. Faure and N. Niessen (eds), Environmental Law in Development: Lessons from the Indonesian Experience, Edward Elgar Publishing, Cheltenham, pp. 182–7.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2000), 'Reducing megacity impacts on the coastal environment: alternative livelihoods and waste management in Jakarta and the Seribu Islands', Coastal Region and Small Island Papers 6, Paris, available at http://www.unesco.org/csi/pub/papers/mega.htm, accessed 3 March 2009.
- Zamansyah, T. (2000), 'Traditional fishers: up against trawling', Samudra, April, available at http://www.icsf.net/icsf2006/uploads/publications/samudra/ pdf/english/issue_25/art01.pdf, accessed 1 March 2009.

12 LEGAL AND ILLEGAL INDONESIAN FISHING IN AUSTRALIAN WATERS

James J. Fox

I should properly begin my narrative in 1728. This was the year in which a Dutch East India Company officer in Kupang first reported seeing Bajau Laut fishermen, with a fleet of some 40 small boats, gathering trepang on the south coast of the island of Rote. The date thus marks the beginning of recorded trepang fishing in the waters to the south of Timor. Within a few years voyages to Ashmore Reef were a yearly occurrence, and within a few decades Makassan voyages to 'Marege' were an established fixture off Australia's northern coast.

These voyages to Australia and in particular to the reefs situated between the mainland of Australia and the islands of Indonesia – numerous, various and for the most part undocumented – have persisted to the present day.¹ They constitute some of the earliest, and still continuing, connections between Australia and Indonesia. Designated as 'traditional', these connections have never been properly explored or adequately understood by the policy makers who have shaped formal maritime relations between the two countries, yet they have influenced – and continue to influence – the contemporary conduct of the relationship. They thus provide a context for any discussion of the fashioning of the formal agreements between Australia and Indonesia that were initiated in the 1970s to define and distinguish legal from illegal Indonesian fishing in Australian waters.

¹ The two best sources of documentation on these voyages are Campbell Macknight's study of Makassan trepangers (1976) and Natasha Stacey's study of Bajau fishermen (2007). In preparing the final draft of this chapter, I have benefited greatly from comments provided by Natasha Stacey on an earlier draft.

Legal and Illegal Indonesian Fishing in Australian Waters 197

196 Indonesia beyond the Water's Edge: Managing an Archipelagic State

The early 1970s, it should be remembered, were a period of particular optimism and mutual goodwill in Australia–Indonesia relations. President Soeharto visited Australia in February 1972 and Prime Minister Gough Whitlam reciprocated with a visit to Indonesia in August 1974, where the two held important talks in Wonosobo. It was in this spirit of cooperation that various legal matters relating to Indonesian fishing were agreed upon.

Since this chapter deals with both legal and illegal fishing, it is essential to begin by defining the differences between these two activities in terms of the legislation and agreements between Indonesia and Australia that were initiated in the 1970s.

THE LEGAL CONTEXT FOR INDONESIAN FISHING

An outline of initial agreements

Seabed negotiations between Indonesia and Australia were begun in March 1970 and in just 15 months, in May 1971, seabed boundaries were agreed upon in the Arafura Sea and the eastern part of the Timor Sea. A maritime demarcation line between Indonesia and Australia was identified by reference to 13 points, thus defining a clear boundary along a stretch of 520 nautical miles. However, a gap was left in this line – the so-called Timor Gap – that has remained unresolved to this day.

Establishment of this border, which came into force on 8 November 1973, created concern in Australia about the activities of the Indonesian fishermen who regularly sailed beyond these limits. In 1968, when Australia established its 12-mile fishing zone for the exclusive use of fishing vessels licensed under Australian law, the Australian government recognized the existence of traditional Indonesian fishing in its waters and allowed such fishing under two provisions: (1) that 'operations were confined to a subsistence level': and (2) that 'operations were carried out in the Declared Fishing Zone and territorial sea adjacent to the Ashmore and Cartier Islands, Seringapatam Reef, Scott Reef, Adele Island and Browse Island' (DFAT n.d.).

Australia's concerns over traditional Indonesian fishing were raised during the talks between President Soeharto and Prime Minister Whitlam and it was decided to hold formal discussions on the issue. These discussions, held in Jakarta on 6–7 November 1974, resulted in the Memorandum of Understanding relating to the Operations of Indonesian Traditional Fishermen, or MOU74. This document of seven paragraphs gave 'traditional fishermen' permission to fish 'twelve miles seaward off the baseline' of five small reefs or islets in the Australian exclusive fishing zone (see Map 12.1). The specific locations were (1) Ashmore Reef, Map 12.1 Traditional fishing zones agreed in the 1974 MOU



(2) Cartier Island, (3) Scott Reef, (4) Seringapatam Reef and (5) Browse Island.² The MOU made it clear that 'Indonesian fishermen will not be permitted to take turtles in Australian waters' but would be permitted to take 'trochus, bêche-de-mer [trepang], abalone, green snail, sponges and all molluscs' from the seabed adjacent to the five reefs and islets specified in the agreement. It did not establish a large sea area for fishing but rather a set of discrete locations in which fishing and marine gathering could occur.

Although the agreement recognized traditional fishing, it failed to designate who exactly such traditional fishermen were or would be. The defining statement in the agreement reads as follows:

By 'traditional fishermen' is meant the fishermen who have traditionally taken fish and sedentary organisms in Australian waters by methods, which have been tradition over decades of time (MOU74, paragraph 1).

Defining 'traditional' by a double reference to 'tradition', specifically in relation to methods of fishing, left undefined who might be involved in this fishing. A history of at least 250 years of fishing in Australian waters by different Indonesian maritime populations — all of whom used basically similar methods — opened the way to multiple claims of 'traditional' fishing and prompted a series of problems over access that have continued to the present time.

The problems that were to arise later were not glimpsed at the time. A press release on the MOU issued by the Department of Foreign Affairs stated that:

The talks were held in an atmosphere of friendly and mutual understanding of the problems of the Australian Government and also of the fact that fishermen from Indonesian villages have traditionally operated for many years in waters off the coast of Australia (News Release D24, 11 November 1974).

Based on the 1974 memorandum, the Australian Fisheries Act was amended to take account of the new arrangements.

An outline of subsequent agreements

In the 1970s, Indonesian trepang fishing was concentrated at Ashmore Reef – a continuation of activities that can be dated back to the first half of the eighteenth century (Fox 1977). Bajau shark fishing was far less concentrated and occurred over a wider area, particularly around the reefs

to the south of Ashmore and along the Kimberley coast (Stacey 2007: 91–5). There is so little specific documentation for this period that it is impossible to identify with certainty other possible fisher groups in these waters. In Indonesian as well as in Rotenese, Ashmore Reef is referred to as 'Sand Island' (Indonesian: Pulau Pasir, Rotenese: Nusa Solokaek; see Fox 1998). In English, the reef was named after Captain Samuel Ashmore, who sighted it in 1811.

From 1840 onwards, Ashmore was exploited by both the British and American ships that regularly visited the reef to gather guano to be used as fertilizer. Britain officially annexed the reef in 1878 and prohibited guano gathering in 1904 but it did not take formal possession of the reef until 1906. Britain transferred possession of the reef to Australia in 1933; this was recognized in the Commonwealth Ashmore and Cartier Islands Acceptance Act of 1933, which came into force in 1934. Western Australia was initially given administration of the islands but in 1938 this was transferred to the Northern Territory (Stacey 2007: 83–5). Following the agreements with Indonesia in the 1970s, the status of reefs within the Commonwealth of Australia required further legislation. With effect from 1 July 1978, the 1933 Commonwealth Ashmore and Cartier Islands Acceptance Act was amended to establish these islands as a separate Commonwealth territory.³

In 1979, the federal government extended the Australian fishing zone from 12 to 200 nautical miles; Indonesia followed suit by extending its fishing zone in March 1980. These mutual extensions created an overlap in national jurisdictions in the Timor Sea. This required the two countries to sign a further MOU, the Memorandum of Understanding on a Provisional Fisheries Surveillance and Enforcement Arrangement. Signed on 29 October 1981, it stipulated that neither country would take action against fishing vessels licensed by the other state beyond a demarcated 'provisional' surveillance and enforcement line. Although these arrangements did not affect traditional fishing, which continued as before, they did apply to motorized vessels seeking pelagic (or 'swimming') fish species. More importantly, seabed boundaries continued to apply for sedentary species on the sea floor, such as trepang.

A further step in the legal developments affecting relations between Indonesia and Australia came with the declaration, on 16 August 1983, of Ashmore Reef as a national nature reserve. This decision was taken for conservation reasons under the 1975 National Parks and Wildlife Conservation Act, prompted firstly by the Agreement between the Government of Japan and the Government of Australia for the Protection of Migra-

² Adele Island, which is much closer to the northwest coast of Australia than Browse Island, was dropped as a declared fishing zone in all subsequent discussions and determinations on traditional Indonesian fishing.

³ This act was later amended, with effect from 1 March 1988, to take into account the nature reserve status of Ashmore and Cartier.

tory Birds and Birds in Danger of Extinction and their Environment, which came into force on 31 April 1981, and secondly by the acceptance of an amendment to Article XI(3a) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which Australia and Indonesia were signatories. From the Australian perspective, this development required a revision to the arrangements regarding traditional fishermen. This involved several years of negotiations and a number of exchanges of documents.

Proposals to restrict fishermen's access to Ashmore Reef as a consequence of its official change in status were first made in August 1986 as part of an attempt to renegotiate the 1974 MOU. These were rejected by Indonesia as unacceptable. A subsequent proposal was put to the Indonesian Department of Foreign Affairs on 25 February 1988 setting forth Australia's position and the arrangements it intended to follow with regard to traditional fishermen from 1 March 1988. These arrangements still limited fishing to 12 nautical miles around the reefs and islands covered by the MOU. The changes proposed in this document were also judged unacceptable by Indonesian officials.

A breakthrough came at a meeting on 2 March 1989 between foreign ministers Ali Alatas and Gareth Evans, which allowed officials from both countries to meet on 28–29 April 1989 to work out new arrangements for traditional fishing. The minutes of these meetings contained 'Practical guidelines for implementing the 1974 MOU' (Environment Australia 2002: 70). They reaffirmed the earlier MOU74 agreement, placing renewed emphasis on traditional fishing methods and access by traditional sailing vessels. The first paragraph began with a statement that used 'tradition' or 'traditional' four times to make its point:

Access to the MOU area would continue to be limited to Indonesian traditional fishermen using traditional methods and traditional vessels consistent with the tradition over decades of time, which does not include fishing methods or vessels using motors or engines (Environment Australia 2002: 70).

The guidelines contained two key changes. First, fishermen were prohibited from all fishing activities, including the gathering of sedentary species, in Ashmore Reef National Nature Reserve, though they were permitted to land at Ashmore's West Islet to replenish their fresh water supplies. Second, traditional fishing activities would no longer be confined to 12 nautical miles around each reef or isle, but would be allowed in an expanded area that has come to be known as the MOU Box—a defined block of sea territory between Indonesia and Australia that contained the principal reefs visited by Indonesian fishermen (see Map 12.2).

The minutes also stated that:





The Indonesian and Australian Officials agreed to make arrangements for cooperation in developing alternative income projects in Eastern Indonesia for traditional fishermen traditionally engaged in fishing under the MOU.... Both sides mutually decided to discuss the possibility of channeling Australian aid funds to such projects with appropriate authorities in their respective countries (Environment Australia 2002: 67, paragraph 8).

THE FISHING COMMUNITIES OF THE SOUTHERN ISLANDS OF EASTERN INDONESIA

The fishing communities of eastern Indonesia are notable for their mobility and adaptability. This can be seen in the movement of many of these communities from the northern to the southern islands of the region over the past two centuries. Many of the most active fishing communities in the southern islands of eastern Indonesia – whether on Flores, Alor, Rote and Timor, or further east on Tanimbar, Aru and the southern coast of Papua – are comprised of migrants or the descendants of migrants from islands further to the north. The repositioning of these fishing communities has also had an effect on local communities, in some cases transforming their farmers into part-time fishermen.

The Bajau Laut are the most mobile of these fishing populations and they were the first to move their settlements southward. This migratory movement began in the eighteenth century and gathered speed in the nineteenth and twentieth centuries. The Bajau Laut have the largest number of settlements in East Nusa Tenggara, from Labuan Bajo to the Bay of Kupang. Bugis and Butonese settlements also expanded southward throughout the twentieth century (Fox 2000: 349–52).⁴

One of the interesting features of the southward expansion of Bugis, Buton and Bajau is that much of it has come, not from the island of Sulawesi as one might expect, but from the many small islands to the south and southeast of Sulawesi. These tiny islands, oriented to the sea as fishing and boat-building communities, did not have the capacity to continue to absorb their growing populations and instead adopted a strategy of exporting their surplus numbers. As a group, all of these islands—Passi Tallu, Sabalana, Bonerate, Karompa, Kayuadi, Kalatoa, Batuata, Wanci, Kaledupa, Binongko—have contributed significantly to the creation of new fishing communities, particularly in East Nusa Tenggara and the southern Maluku islands. As a continuing historical process, this migration southward has tended to follow the same pattern. Young men leave in search of a livelihood, eventually establish themselves in some new settlement where others from the same island have previously settled, marry locally or, more often, return to marry a woman from their home village, and eventually bring her to the new settlement. Over time, links with the home island weaken and more marriages are contracted locally. In virtually all these settlements Islam provides a bond that facilitates the mixing of migrants from different islands.

The most prominent fishing settlements on the southern islands of eastern Indonesia are Oelaba and Pepela on the island of Rote; Namosain and Oesapa on the Bay of Kupang; Saumlaki on the southern tip of the island of Tanimbar; the port town of Dobo on the island of Aru; and Merauke on the Papuan coast. Each of these sites provides a harbour for the small-boat fishermen who have, until recently, regularly fished, either legally or illegally, in Australian waters.

While all of these settlements share common features, the differences between them are equally marked. The small fishing settlements of Oelaba and Pepela, for example, were initially established at different strategic locations on the island of Rote in the early years of the twentieth century, mainly by migrants of 'Butonese' origin.5 Namosain was once the main port of the Rotenese in the Bay of Kupang. The coastal strip near the town of Kupang on which it is located was originally granted to the Rotenese by the Dutch East India Company in the seventeenth century. In the 1980s, by governor's decree, it was made the main port for all sailing vessels and has continued to expand since then as a near-suburb of Kupang. Communities from all the fishing populations of eastern Indonesia live there. Oesapa is located further to the east of the town of Kupang. It was previously a small Rotenese settlement, but since the 1970s it has expanded considerably through a large influx of Bugis migrants who engage in trade and fishing. Saumlaki is another small port, but one that is conveniently located for sailing into Australian waters and has thus attracted a mixed group of fishers from other islands. Dobo, by contrast, is a port town of historical importance since the nineteenth century. It was once a major port for the trade between Makassar and the Papuan coast. Although no longer as important as it once was, Dobo continues to provide a seasonal rendezvous point for fishermen from numerous small islands further to the east and, as a consequence, still attracts new settlers from these islands. Merauke is the premier southern fishing port of the province of Papua; its harbour is filled with both large and small vessels.

⁴ In the late 1990s, the Bugis were expelled from East Timor and were temporarily driven out of Kupang, while the Butonese retreated from settlements on Ambon. This may be seen as temporary, however; the Bugis settlement at Oesapa in the Bay of Kupang has largely been restored.

⁵ The term Butonese actually embraces several distinct ethno-linguistic groups. What unites them is a heritage as subjects of the former Sultan of Buton.

It represents a new frontier for the small-boat fishermen of eastern Indonesia, and in recent years fishermen who previously sailed from Dobo have begun to shift to Merauke.

The populations of these fishing settlements continue to expand at rates that reflect the opportunities they appear to offer. There is also migration, both on a seasonal and permanent basis, from nearby communities to the more prominent fishing settlements. Each settlement can be said to have a network of established connections linking it to other fishing communities in the region. In addition, the fishing communities often recruit temporary crew from neighbouring farming communities, which in some cases have themselves taken up voyaging into Australian waters. Investigating the history of any one of these settlements uncovers links across the region.⁶

Added to this mix of eastern Indonesian fishermen are Madurese from the tiny island of Raas and the even tinier island of Tonduk. Madurese sailors and traders have long played an important maritime role in eastern Indonesia. By one account, it was the Madurese who showed the Rotenese how to build their first long-voyage sailing boats (*perahu*). Madurese fishermen are involved in trepang gathering throughout Indonesia and have a tradition of fishing for trepang in Australian waters. The fishing fleet on Raas has now been modernized, leaving only about a dozen traditional *perahu* (or *lete-lete*) on Tonduk to carry on traditional sailing. All have engines fitted to them, which they remove and leave in Pepela before sailing south. This occurs on an annual basis; hence Raas and Tonduk must be added to the list of ports that regularly send *perahu* into Australian waters.⁷

7 Australian documents identify three types of Indonesian fishing vessels. Type I refers to sailing *perahu*, also known in Indonesia as *lete-lete*. These are the boats with a lateen sail used by the Madurese fishermen from Raas and Tonduk. Type II refers to a large class of sailing *perahu* known as *lambo*. The *lambo* has a Western-style sailing rig originally developed from a Dutch model in the nineteenth century (Horridge 1979). *Lambo* are used by Rotenese and Bajau fishermen as well as most Butonese sailors. Type III refers to all motorized vessels, large or small, with or without the addition of a sail. (In Indonesia, it is common for sailing *perahu* to have auxiliary engines.) In the most recent Australian government documents, types I and II are lumped together, allowing a simple contrast between sailing and motorized vessels (see Stacey 2007: 100–1 for descriptions and drawings). The Australian

THE TARGETS OF FISHING

Shark and trepang are the principal species targeted by Indonesian small-boat fishermen. Trochus and other shells are often gathered during trepang-gathering expeditions but shell gathering is rarely the main or exclusive focus of fishing efforts. Nevertheless the quantities of shells, particularly trochus, obtained on voyages in Australian waters are considerable.

Sharks are caught on longlines or, in some cases, with nets and their fins cut off.⁸ This allows small boats to catch a large number of sharks but to reduce their take to a small quantity of fin. Gathering trepang involves more labour. Trepang can be picked up in shallow waters along reefs or gathered by diving in deeper waters. Most fishermen employ both methods. Once gathered, the trepang must be boiled on board the boats, salted and then sun-dried on deck before being bagged for storage below deck. This is usually a daily process and requires each trepang boat to carry a large supply of firewood. While nylon lines and hooks, although expensive, are all that is needed for shark-fishing expeditions, the outfitting of trepang boats, whose crews may spend a month or two gathering their catch, requires substantial quantities of rice and drinking water, salt, kerosene for lamps (since most gathering takes place at night) and at least a truckload of firewood.

Both trepang and shark fin are intended for sale to the Chinese market. Trepang has long been part of a well-established 'China trade'. Progressively, over a period of many centuries, different products from eastern Indonesia – first cloves, then sandalwood, then nutmeg, and finally trepang – were gathered into this trade. It was the search for trepang by so-called Makassans – actually a mix of seafarers, Makassarese, Bugis and Bajau – that opened the north coast of Australia to this trade.⁹

There is a developed market in Indonesia for both trepang and shark fin. Local agents handle these products for intermediary agents who generally sell them on to merchants in Surabaya, who are the main export suppliers to Singapore, Hong Kong and elsewhere.¹⁰ For those at the top

⁶ In East Nusa Tenggara, for instance, Lamaholot-speaking populations from the island of Solor have a long tradition of maritime activities. The main rulers of Solor allied themselves with the Dutch in the first half of the seventeenth century and were given a coastal strip near the fort at Kupang when the Dutch established themselves there in 1652. Lamaholot speakers also settled on Pantar and around the Bay of Kalabahi on the island of Alor. Over time, Kalabahi Bay became an important trading point and settlement area for migrants from Sulawesi.

National Maritime Museum has a *lete-lete* in its collection (Mellefont 1988, 1991); the Northern Territory Museum has a *lambo* in its collection (Stacey 1992).

⁸ Under Australian law, the practice of shark finning is prohibited. In the Australian industry, the whole shark must be returned to port.

⁹ Fox (2008) examines the role of trepang and shark fin in the China trade and how their pursuit eventually drew the northern coast of Australia into a wider Southeast Asian trade with China.

¹⁰ For centuries, Makassar was the great emporium for trepang. Alfred Russel Wallace provides a remarkable description of Makassar's trade in trepang in the middle of the nineteenth century: ""tripang" or sea-slug are obtained by

of this marketing chain, this is a lucrative market—or was when supplies were abundant and Indonesia was the world's leading source of both shark fin and trepang. Although reliable information on this trade is limited, the supply of both these valuable marine products from within Indonesia appears to have declined considerably over the past decade. Their increasing scarcity has raised the prices of these products, prompting poor fishermen to take greater risks to obtain them.

The market discriminates between different varieties of shark and trepang, setting a range of prices according to size and variety.¹¹ The higher-priced varieties are sought after and so, where possible, specifically targeted by fishermen. Prices rise as depletion advances. Thus, for example, hammerhead and sawfish sharks along with shovelnose rays command a higher price than black tip and sandbar sharks, which are among the most common varieties caught by Indonesian fishermen. According to the fishermen themselves, the numbers of high-value shark have fallen significantly. Whereas in the 1990s hammerhead sharks and shovelnose rays were regularly caught at the southern end of the MOU Box, from 2000 onwards fishermen say that these varieties are only to be found in or near the Gulf of Carpentaria.

In the case of trepang, the prickly redfish (*Thelenota ananas; nanas* or *nenas* in Indonesian) and white teatfish (*Holothuria fuscogilva; koro susu* in Indonesian) command three times the price of ordinary leopardfish or flowerfish sea-cucumbers (*Bohadschia argus* and *Pearsonothuria graeffei;* both called *bintik* in Indonesian) and are becoming rarer. Some varieties that were once gathered in substantial quantities at Scott Reef, such as stonefish (*Actinopyga lecanora; obor* in Indonesian) and amberfish (*T. anax; duyung* in Indonesian) are now becoming a memory.

LEGAL FISHING IN THE MOU BOX

Since 1974, Indonesian fishermen have been permitted to enter Australian waters and fish legally on a regular annual basis. To fish legally, fishermen are required to confine their activities to the area defined by the MOU and use only 'traditional' methods of fishing and gathering. Until 1989, when the revision to the 1974 agreement extended the area open to legal fishing beyond the 12-nautical-mile limit of the reefs, most legal fishing involved the gathering of trepang and trochus and was concentrated at Ashmore Reef. The 1989 revision insisted on the use of sailing vessels only, ending the ambiguity surrounding the use of small motorized vessels to fish the various reefs.

When Ashmore was closed to Indonesian fishermen, trepang and trochus gathering shifted to other reefs, particularly Scott Reef, and shark fishing, which had always occurred, came to increasing prominence given the expanded sea area in which the fishermen were permitted to operate. Beginning in 1986, Australia stationed a boat at Ashmore for the main fishing months of the year to record arrivals.¹² Fishermen were expected to stop there to register their presence and receive an authorization stamp in their logbook—usually a simple exercise book of the kind used in schools.

Developments in response to changing conditions

Diverse sources provide evidence of fishing by Indonesian perahu at Ashmore and later along the north coast of Australia from the first half of the eighteenth century (Macknight 1976; Fox 1977). In an oral narrative recorded in the nineteenth century, the Rotenese claim to have discovered Ashmore Reef during the early eighteenth century (Fox 1998: 104-10).13 The Bajau Laut are another group for whom historical documentation of visits to Ashmore and other reefs exists (Stacey 2007). Complaints to the Commonwealth government by the Western Australian state government about Indonesian fishermen at Ashmore in 1923, which had to be referred to the British government, led to the transfer of Ashmore and Cartier to the Commonwealth of Australia in 1931 (Russell and Vail 1988: 14). A fishing survey conducted by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in 1949 aboard the FRV Warreen noted perahu at anchor at Ashmore and others in the vicinity at sea, and still more at Seringpatam Reef: an estimated 30 perahu loaded with dried fish, eel, shark fin, clam meat, trepang, turtle shell and

shiploads for the gastronomic enjoyment of the Chinese' (Wallace 1869: 158). In contemporary Indonesia, Surabaya has eclipsed Makassar in the trade of trepang and shark fin.

¹¹ Precise identification of species is a complex task, because locally named 'varieties' of both shark and trepang do not coincide with taxonomic species. Names for varieties vary between localities. For an attempt to match fishermen's identifications with shark species, see Fox and Meekan (2006); for an attempt to identify trepang species, see Fox (2008). The examples I cite here are those where there is a reasonable fit between the Indonesian variety name and a recognized species.

¹² Originally, the Department of Arts, Sports, the Environment, Tourism and Territories hired a contractor to provide this boat and record vessels visiting Ashmore. This function was later taken over by Customs.

¹³ What gives some credence to this oral narrative is that three of the four rulers in the tale can be identified in Dutch East India Company records in the early eighteenth century.

considerable quantities of trochus. The fishermen had erected drying racks for clam meat and fish on Ashmore Reef (Russell and Vail 1988: 15). Only in 1974, when these activities were officially noticed by the Australian government, were some of them prohibited. The taking of turtle shell and clam meat, for example, was forbidden.

Little monitoring was done of Indonesian fishing activities until the 1970s. Western Australian Fisheries was the first authority to begin to board Indonesian *perahu* in the 1970s to establish their identity and create a record of their catch. Official Commonwealth records for Ashmore began only in 1986. In 1987, after Ashmore was declared a national nature reserve, the Australian National Parks and Wildlife Service commissioned the Northern Territory Museum to undertake a survey of marine resources 'to assess the impact of traditional fishing activities' at Ashmore. By the time it had completed its report, the survey team had available to it two and half years of records dating from April 1986 to June 1988. These showed that a total of 151 *perahu* had visited Ashmore during the period, some in successive years. The general conclusion of the survey was clear:

Most of the regular visitors were from Roti. Rotinese boats predominated [in] the number of *perahu* visiting Ashmore Reef, and comprised one half to two thirds of the total number of vessels recorded in each year. Visits by these vessels constitute a regular and sustained fishing effort at Ashmore. Few other vessels were regular visitors, and the majority of *perahu* recorded (72.8 per cent) appeared in only one year (Russell and Vail 1988: 24).

Based on interviews conducted in September 1987, the authors reported that some of the *peralu* that made 'irregular' visits to Ashmore 'appeared to be fishing mainly on an exploratory basis' and 'were inexperienced at trepang and trochus fishing (Russell and Vail 1988: 24, 37). They also noted the presence of motorized *peralu* from Buton visiting Ashmore en route to other reefs, and speculated whether their numbers represented an increasing trend (Russell and Vail 1988: 37).¹⁴

The authors observed what they described as a 'strong bimodal seasonal pattern' at Ashmore: Indonesian *perahu* would make their first visits in March and April and return for a longer season lasting from August to October. The same weather-dependent pattern continues to the present day, whereby *perahu* rely on prevailing winds and avoid sailing at those times of the year when the seas are rough and there are strong contrary winds. From interviews, it was apparent that the fishermen identified themselves according to their distinct activities:

Most crew would either identify themselves as trepang, trochus, or shark fishermen. Trepang and trochus fishermen tended to collect almost anything of value while shark fishermen were less likely to be collecting other marine fauna. For trepang and trochus fishermen, the bulk of their catch would generally consist of trepang (Russell and Vail 1988: 41).

Perhaps the most revealing observations concerned the upswing in the Indonesian trepang market. Whereas the Madurese fishermen from Tonduk had long experience in trepang gathering at Ashmore, many others had shifted to more intensive gathering of trepang in the 1980s as prices increased and quantities of harvestable trochus declined.

Australia's attempts to ban fishing at Ashmore finally succeeded in 1989, when Australia and Indonesia reached agreement on the revision to the 1974 MOU. The closing of Ashmore to trepang fishing shifted fishermen's efforts to shark fishing within an enlarged MOU Box and directed trepang gathering to Cartier (briefly, until it was declared a marine reserve in 2000) and to Scott Reef and other reefs. However, the number of Indonesian boats continued to increase, including the number of *perahu* from Rote.

Developments among fishermen on Rote in the 1990s

Changing conditions of access to Australian waters prompted the fishermen on Rote, who made up the majority of those sailing into the MOU area, to make a number of changes, not just in response to the new guidelines, but also in response to changing market conditions in Indonesia. The price of shark fin, for example, was increasing even more rapidly than that of trepang, offering fishermen who could position themselves to take advantage of the situation the possibility of greater profits.

Before 1989, there was a rough occupational division of labour among fishermen on Rote. The overwhelming majority of Rotenese fishermen were trepang and trochus gatherers, whereas the Bajau, though not exclusively shark fishers, made up a majority of those who fished for shark.¹⁵ Beginning in 1989, many of these Bajau, particularly those from Mola on the island of Wanci, began to settle in Pepela, where they were given the coastal stretch known as Tanjung Pasir as a separate area of residence. Natasha Stacey has documented this movement of Bajau to

¹⁴ It is possible that the number of motorized *perahu* prompted Australian officials, in the revision to the MOU in 1989, to insist on access by traditional sailing vessels only.

¹⁵ The list of names and ports of origin of the *perahu* visiting Ashmore between March 1986 and June 1988 (Russell and Vail 1988: Table 1) reveals a considerable number of vessels from known Bajau settlements on Wanci in the Tukang Besi Islands and Passi Tallu to the south of Selayar.

Rote in considerable detail, noting that it was accompanied by an influx of new traders who established their base in Pepela specifically to compete for the increasing trade in shark fin (Stacey 2007: 118–33). Pepela fishermen who had previously fished for trochus and trepang relied on the Bajau to join their crews and teach them shark-fishing skills.

Gradually through the 1990s, all of the *perahu* in Pepela shifted to shark fishing. At the same time, increasing numbers of Bajau from Wanci and Kaledupa moved to an ever more crowded Tanjung Pasir for the same purpose (Fox 1998: 127–9). Given the mobility of the Bajau, this happened quickly. In November 1992, there was a single Bajau house at Tanjung Pasir (see plate 6.2 in Stacey 2007: 128); by June of the following year, 113 Bajau families were living in Tanjung Pasir and more continued to arrive in each of the following years.

Developments in Pepela prompted changes elsewhere on Rote. The other main fishing settlement of Oelaba, located on the northwestern coast of Rote, had previously relied as much on small-scale interisland trade as on trepang gathering for its livelihood. The shift to shark fishing by Pepela fishermen opened a niche for Oelaba fishermen to increase their trepang-gathering activities in the MOU Box.

Poor returns from dryland farming combined with the possibility of employment on boats venturing into the MOU Box drew local Rotenese farmers into new sailing opportunities. Rotenese villagers from the settlements of Mae Oe and So'ao in Daiama, a village near Pepela, joined Pepela boats as crew and eventually added their own *perahu* to the sharkfishing fleet. At the same time, on the other side of the island, villagers from Hundi Huk and Dau Dulu joined the Oelaba *perahu* in trepang gathering. They, too, eventually developed their own small fleets. In need of more manpower, boat owners in Oelaba began recruiting men from the islands of Pura, Pantar, Treweng and Buaya near Alor.

A lengthy report by Fox and Sen (2002) has examined this period in some detail. Of the 1,678 voyage records in the Ashmore database covering the period 1988–99, 1,426 (85 per cent) identify vessels from the island of Rote. These records, which cover repeated voyages over a period of more than a decade, specifically identify, by name, 393 Rotenese *perahu*. These *perahu* constitute 93 per cent of all *perahu* listed by name and port in the database.¹⁶ *Perahu* from Pepela accounted for 66 per cent of all voyages to Ashmore but 69 per cent of all vessels; *perahu* from Oelaba accounted for 16 per cent of voyages but 19 per cent of vessels. To these totals may be added voyages by *perahu* from Mae Oe and So'ao within the Pepela network and *perahu* from Hundi Huk, Dau Dulu and Pantar in the Oelaba network (Fox and Sen 2002: 18–19).

The other two identifiable groups of fishermen are the Madurese trepang fishers (mainly from Raas and Tonduk) who represent 5.6 per cent of voyages but 6.7 per cent of vessels and the Bajau shark fishers from Wanci and Kaledupa who identify themselves by their home island rather than their resettlement area of Tanjung Pasir. These fishermen represent 3 per cent of voyages but 5 per cent of vessels. Although the pattern of fishing activities changed in the 1990s and the number of fishermen increased, the Ashmore database reveals a significant continuity in the ethnic composition of 'traditional' fishermen. New recruits were mainly Rotenese farmers who took up fishing and a similar group of villagers from Pantar and Alor who joined the Oelaba fleet.

ILLEGAL FISHING IN AUSTRALIAN WATERS

Just as legal fishing increased in the MOU Box during the 1990s, illegal fishing in Australian waters also increased. It was not confined simply to the area in and around the MOU Box but occurred across a broad front along the whole of the northern coast of Australia.

From 1988 to 1999, 48 sailing vessels were caught sailing beyond the eastern or southern limits of the MOU Box, half of them in search of shark, and some as far south as the Rowley Shoals and Kings Sound. A number were repeat offenders. During this period, 107 vessels were apprehended within the MOU Box, including 105 motorized vessels. (The other two were *perahu* caught trying to gather trepang at Ashmore.) The majority (75 per cent) were caught using diving equipment to fish for trepang. A large number of the boats were identified as coming from Sulawesi and most were apprehended in 1994; one fleet of 24 trepang boats was apprehended in September 1994 and another of 35 trepang boats was apprehended in November 1994.¹⁷ For most of the period, there were only one or two apprehensions a year in the MOU Box, but in 1994 there were 63 apprehensions and in 1995 there were 21 (Fox and Sen 2002: 19).

In the early 1990s, a new wave of intrusions into Australian waters began with the arrival of small-boat shark fishermen sailing south from

¹⁶ The database includes a significant number of records for which complete information, notably port of departure, was not recorded.

¹⁷ Indonesian information indicates that most were part of what was known as the Sinjai fleet, a large contingent of boats that made their way around eastern Indonesia, fishing and gathering where they could. In 1994, without previous experience, they seem to have decided to venture into the MOU Box, relying on information from fishermen in Kupang and Pepela.

Dobo (Fox 1992). Between 12 and 15 March 1991, 29 *perahu* were apprehended while fishing for shark. Although they had all sailed from Dobo, the crews and captains of most of these boats came from a variety of small islands in eastern Indonesia: Bonerate, Kalatoa and Karopa in South Sulawesi, Binongko in Southeast Sulawesi, Pomana and Wuring on Flores, and Binonko on Alor. All of these fishermen identified themselves as Butonese and some had family connections with the fishermen on other boats: the Kalatoa and Karopa boats, for example, could be linked to those from Wuring. To the fishermen, the spectacular rise in the price of shark fin at the time was justification enough for venturing into Australian waters. A number of traders in Dobo were prominent in encouraging this marine trade (Fox 1992).

One recurrent refrain among the fishermen was that their own waters were being heavily overfished by larger vessels, often of foreign origin, impeding their attempts to pursue a livelihood. The number of sharks in Indonesian waters, by these fishermen's accounts, was diminishing.¹⁸

In the 1990s, the fishermen from Dobo sailing into Australian waters were joined by fishermen from Saumlaki and Merauke. Merauke, in particular, expanded as a port for small-boat shark fishermen, many of whom began sailing deep into the Gulf of Carpentaria in search of shark.

Another development was the intrusion of much larger, more sophisticated motorized fishing vessels, called 'ice-boats' because they had the capacity to freeze their catch. These boats targeted several valuable species of fish: two species of red snapper (*Lutjanus malabaricus* and *Lutjanus erythropterus; ikan merah* in Indonesian); the gold-band snapper (*Pristipomoides multidens; godi* in Indonesian); and, to a lesser extent, the marble hawkfish (*Cirrhitus pinnulatus; kakap kecil* in Indonesian) (Fox and Meekan 2006).

The vessels involved in this fishery were based in a number of eastern Indonesian ports: Tenau near Kupang on Timor, Tual in the Kei Islands, Benjina on Aru Island, Merauke on the Papuan coast and, most significantly, Probolinggo on the north coast of East Java. The Probolinggo bottom longline fishing boats were originally based in Tanjung Balai on the Riau island of Karimun in Sumatra and initially fished in the South China Sea. In the 1980s and early 1990s, as operations in the South China Sea became more difficult, the fleet shifted its base to Java and its operations to the Arafura and Timor seas, using various local ports as substations. Ships in this fleet were equipped with global positioning systems (GPS) and radar and could make radio contact with one another. They would position themselves along the border and enter Australian waters as the opportunity presented itself.¹⁹

Developments in illegal fishing after 2001²⁰

From 2001, there was a huge increase in illegal fishing in Australian waters from the key southern ports of eastern Indonesia: Pepela, Saumlaki, Dobo and Merauke. Some of the most radical developments occurred in Pepela, where purpose-built small boats known as *bodi* began a new wave of shark fishing. The smaller *bodi* had 24-horsepower engines and could accommodate three or at most four crew; they were heavily loaded with diesel fuel. The larger *bodi* had two even more powerful engines and could accommodate five to six crew members. Most of these *bodi* were constructed on islands further to the north and brought to Rote to replace Pepela's *lambo-perahu* fleet. Most carried a complement of five lines with 16 hooks per line, though some larger *bodi* carried six lines and even more hooks.

These boats were designed to make quick incursions into Australian waters. Initially most captains relied on GPS for precise navigation, but as sailing patterns became regularized, less use was made of this technology. Shorter incursions were directed to an area known as the 'Enterprise' or 'Operations' area (Perusahaan) because of the presence of oil rigs.²¹ Here, according to fishermen, there was less Australian surveillance than elsewhere. Longer incursions went beyond Scott Reef at the southern end of the MOU Box to an area closer to the Australian coast known as Bawa Pulau Dato. Some boats ventured even further south into waters near the Rowley Shoals and closer yet to the Australian coast, a general area referred to as Bawa Angin or Masor.²²

Shorter incursions would take three to five days; the longer and far more dangerous incursions lasted seven or eight days. For short trips, fishermen set themselves a target of seven shark; for longer trips, they set a target of at least 10 shark, generally the larger, higher-value ones. The key to the profitability of this fishing was a quick turnaround after each trip. Whereas a sailing voyage might take two weeks or more, it was possible to make several *bodi* voyages in a single month. By October 2005,

¹⁸ For a discussion of illegal fishing in the Arafura Sea and its social effects, see Resosudarmo, Napitupulu and Campbell (2009).

¹⁹ See Fegan (1999) for more detailed information on the Probolinggo boats.

²⁰ This section of the paper is based on Fox et al. (2009), which contains more details on the development of illegal fishing during this period.

²¹ This area is roughly coincident with the lower half of what was previously referred to as the Timor Gap.

²² Bawa Angin was a traditional fishing ground for the Bajau Laut well before 2000 – probably dating back to a period before World War II (Natasha Stacey, personal communication).

Legal and Illegal Indonesian Fishing in Australian Waters 215

214 Indonesia beyond the Water's Edge: Managing an Archipelagic State

Pepela's *bodi* fleet had increased to several hundred vessels and scores of shark-fishing vessels from Pepela were travelling into Australian waters on an almost daily basis. The main obstacle faced by the boat owners who controlled these operations was to obtain sufficient fuel to maintain the quick turnaround time between voyages, particularly after October, when a reduction in the fuel subsidy dealt a serious blow to the operations of *bodi* from Pepela.

While there was also an increase in the number of shark-fishing vessels from Saumlaki and Dobo, the biggest changes occurred in Merauke. Merauke provided a more strategically placed port for shark fishing, especially into the Gulf of Carpentaria, and thus attracted fishermen who had previously been based in Dobo or had used Dobo as a seasonal port. After a tsunami struck the north coast of Flores, fishermen from Wuring moved to Merauke, adding to the numbers available for shark fishing. As a rapidly expanding port, Merauke also drew a mix of fishermen from South and Southeast Sulawesi. It offered the advantage of proximity to a productive boat-building industry in Kumbe, approximately 60 kilometres from the town. By 2005, Kumbe was reported to be producing 30–50 boats of various sizes each year.

Whereas Pepela boat owners opted to reduce the size of their boats, Merauke boat owners opted for larger versions of the motorized vessels used in the area. A standard boat with a raised cabin superstructure would have five to seven crew members and carry roughly the same number of lines and hooks as most Pepela *bodi*. The newer Merauke boats, however, showed various innovations. They were larger and more powerful, and used double (or even triple) 23-horsepower in-board engines. They had a distinctive bow winch beam to combine longline and net fishing, with the winch beam needed to haul in the net. To use their nets, these boats needed to operate close inshore along the Australian coast.

The effect of these rapid changes in technology was an enormous build-up of fishing in Australian waters. By October 2005, it is estimated that there may have been as many as 300–400 *bodi* and other *perahu* operating out of Pepela, possibly 40–50 motorized boats out of Saumlaki, at least 100 out of Dobo and more than 150 out of Merauke. Sightings by Australian surveillance authorities jumped correspondingly. In September 2005, there were 1,272 sightings of Indonesian vessels in Australian waters. In response, over a period of two years, the Australian navy in cooperation with Customs carried out successive large-scale operations to deal with illegal fishing. The first of these was Operation Clearwater, conducted from 4 to 19 October 2005. It was followed by Operation Breakwater, which was carried out from 19 March to 4 April 2006.

The number of apprehensions of vessels soared. In October 2005, 59 vessels were apprehended – the highest number ever apprehended in a

<i>Table 12.1</i>	Sightings and apprehensions of motorized vessels in Australia's
	northern waters

Month	2005/06		2006/07		2007/08	
	Sight- ings	Appre- hensions	Sight- ings	Appre- hensions	Sight- ings	Appre- hensions
September	1,272	27	818	45	71	14
October	954	59	450	27	107	15
November	755	29	520	33	79	25
December	693	48	97	11	58	17
January	407	21	41	11	31	6
February	800	35	41	6	11	13
March	448	46	43	7	62	15
April	446	32	45	5	83	30
May	883	37	105	14	88	1
June	283	22	11	1	72	1
July	504	41	79	3	58	1
August	933	15	57	7	102	0
Total	8,378	412	2,307	170	822	147

Source: Australian Border Protection Command.

.....

single month. Over the 12-month period to the end of August 2006, apprehensions reached 412 vessels. This high level of apprehensions served as a significant deterrent, with both sightings and apprehensions dropping over the next year. In the 12 months to the end of August 2007, 170 vessels were apprehended, and in the following year 147 (see Table 12.1).²³ Although far fewer than in 2005, apprehensions in 2008 were still high and indicative of a continuing problem.

THE CONTINUATION OF LEGAL FISHING AT SCOTT REEF

During the period in which Pepela became a major port for illegal shark fishing, Oelaba and its satellite settlements of Hundi Huk and Dau Dulu continued to send boats to gather trepang legally at Scott Reef. They were joined each year by a small number of boats from Tonduk. This pattern

²³ I wish to thank Tom Marshall, Director General, Border Protection Operations, for providing these data.

of sailing was set in place by the 1989 revision to the 1974 MOU that had closed Ashmore.

During the high season from August to October 2007, a total of 71 *per-ahu* visited Scott Reef, all gathering trepang and some also gathering trochus. Eleven of these *perahu* were from Tonduk and the rest from Oelaba, Hundi Huk and Dau Dulu. Many, perhaps a majority, of the *perahu* from Oelaba were manned by captains and crew from Pantar, Pura, Tereweng and Buaya in the district of Alor. Driving them to undertake these voyages was the rising price of trepang.

Given the number of fishermen who now regularly gather trepang at Scott Reef, the issue is one of the sustainability of the stock – a subject that was first raised at the time of the Makassan voyages to northern Australia and was again raised as the reason for the closure of Ashmore Reef and Cartier Island. The fishermen themselves are aware of the decline in trepang, but as long as the prices paid for it remain high, they will continue to concentrate on intensive gathering. This, then, is the dilemma they currently face – one that will, it is assumed, affect their future.

CONCLUDING OBSERVATIONS

This chapter has focused on a 40-year maritime relationship between Australia and Indonesia and the particulars of Indonesian fishing during this period. Several observations can be made about this relationship with regard to both legal and illegal fishing.

First, in 1968 the Australian government's conception of 'traditional' fishing was based on a false assumption, one that has from time to time resurfaced. The stated assumption in the first documents was that traditional fishing operations were for subsistence purposes. In fact, insofar as they focused on two major products, trepang and shark fin, they were part of a centuries-old China trade. In contemporary terms, this means that this traditional fishing is attuned to a market, responds to changing prices and has been carried out to meet market demand. Over the past 40 years, market demand has risen enormously in response to growing affluence in the Chinese world.

Second, it is indicative of a certain continuity that many of the same 'ethnic' groups that historically participated in these specialized fishing efforts continue to be involved in fishing in Australian waters. Rote remains a critically important departure point for voyages to the south, as it has since the early part of the eighteenth century.

Third, since the time of the 1974 MOU, the notion of 'tradition' has thwarted discussion of access. The drafting of the memorandum is circuitous. The defining sentence of the first clause refers to 'tradition' three times without attempting to specify to whom it is meant to apply. Tradition is viewed more in terms of fishing methods than the historical practices of specific groups over time. The 1989 revision to the memorandum succeeded only in reinforcing this notion by insisting on access to the MOU by sailing boat.

The insistence on traditional sailing vessels officially and legally opened the MOU Box to a wide range of maritime populations in eastern Indonesia, many of whom had never previously been involved in fishing in Australian waters. The official access rulings resulted in what might be termed two distinct streams of fishermen accessing Australian waters, as observed by Russell and Vail in 1986. On the basis of a few years of data collected at Ashmore, they were able to distinguish between boats that visited the reef on an exploratory basis and those that came regularly on an annual or near-annual basis. In the 1980s, there was thus a recognizable core of boats that was continuing to conduct activities that, for the most part, had been going on from the time of the original memorandum or before.

Later analysis of the Ashmore database confirms these observations. Based on records of visits to the reef between 1986 and 1999, Fox and Sen (2002) found that vessels from Rote, Raas/Tonduk and Wanci/Kaledupa (the latter including Bajau fishermen who had settled in Tanjung Pasir on Rote) accounted for the vast majority (96 per cent) of the fishermen legally permitted to fish in Australian waters.

Almost another decade's records have since been added to the database. By all indications, they will confirm the same pattern. The Ashmore database is a log of boats that register at Ashmore before sailing further into Australian waters. Boats are registered by name of *perahu*, captain, owner and home port. It is therefore possible to use the database to trace the recurrence and succession of named vessels from specific ports, and even the succession of boat captains working for particular owners. Interestingly, in terms of continuity, some of the *perahu* identified in the 1986 Russell and Vail report could still be identified by name at Scott Reef in 2007.

The original memorandum referred to fishing in Australian waters 'over decades of time'. The Ashmore database represents four decades of 'traditional' fishing and would make it possible to identify with greater precision just who the 'traditional' fishermen are. As yet, however, this interrogation of the database has not been attempted.

Fourth, the exemption of 'traditional' Indonesian fishermen from the application of Australian laws on fishing and rules of management has been an unequivocal miscalculation that has dogged all subsequent discussions. Thus, for example, shark finning is prohibited under Australian law but is permitted to Indonesian fishermen in the MOU Box. Similarly,

without limits on access or quotas on catch, Indonesian fishermen are officially able to deplete the resources they seek beyond recovery.

What began in 1974 as an agreement to allow so-called traditional fishermen, whose numbers at the time were unknown, to continue to sail to a few reefs in Australian waters has taken on a treaty-like status that has made it increasingly difficult to establish a viable system of marine management without Indonesian agreement. Indonesian authorities have in the past acquiesced in supporting Australian efforts when presented with clear evidence of serious depletion. This was eventually the case with the closure of Ashmore and Cartier to trepang and trochus gathering.

To present reliable evidence on resource depletion, however, the Australian government must monitor resources and establish data on depletion over a period of years. In the case of Scott Reef, where the threat of depletion is greatest, this has only just begun. The first credible study of its kind was carried out only in September 2008.

Fifth, the establishment of the MOU Box in 1989, as opposed to 12nautical-mile limits around particular reefs, opened Australia to an increase in illegal fishing, because the MOU Box could be used as a strategic departure point for incursions to the south and west. These incursions are, however, only part of a larger problem of illegal fishing from many points of departure along Australia's border. It is this problem that Navy and Customs have had to address over the past several years and must continue to monitor in the future.

Sixth, as part of its 1989 negotiations with Indonesia, the Australian government agreed 'to make arrangements for cooperation in developing alternative income projects in Eastern Indonesia for traditional fishermen traditionally engaged in fishing under the MOU'. Since this time, there have been only two pilot projects to develop alternative livelihoods on Rote and the Bay of Kupang.²⁴ If such efforts are to succeed, they will require long-term development, especially of those components that have been successfully developed in previous pilot projects.

Finally, it needs to be pointed out that a major source of dispute over Indonesian fishing does not concern the MOU Box at all, but rather the area of sea between two defined boundaries: Australia's seabed boundary and its fishing zone boundary. Roughly a dozen motorized trepang boats were apprehended in 2008 in the zone between these boundaries – though the fishermen themselves insist that they were in Indonesian waters. Apart from any argument over specific location, the disputed issue is whether the boats were trap fishing, which is permitted, or taking trepang from the seabed, which is prohibited. The captains of four of these vessels were flown from Kupang to Darwin in August 2008 for a hearing of their cases. A decision of the Darwin magistrate may be the next critical judgment to feed into the continuing international dialogue on a longstanding relationship.

REFERENCES

- DFAT (Department of Foreign Affairs and Trade) (n.d.), 'The control of Indonesian traditional fishing in the Australian fishing zone off north-west Australia', unpublished collection of documents, Canberra.
- Environment Australia (2002), Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve (Commonwealth Waters) Management Plans, Canberra, available at http://www.environment.gov.au/coasts/mpa/publications/ pubs/cartier-plan.pdf.
- Fegan, Brian (1999), 'Field report on September 1999 socioeconomic research in Probolinggo, East Java', CSIRO project on biology, fishery assessment and management of shared snapper fisheries in northern Australia and eastern Indonesia, Project No. FIS/97 165, Canberra.
- Fox, James J. (1977), 'Notes on the southern voyages and settlements of the Sama-Bajau', *Bijdragen tot de Taal-*, *Land- en Volkenkunde*, 133: 459–65.
- Fox, James J. (1992), 'Report on eastern Indonesian fishermen in Darwin', Illegal Entry, Occasional Paper Series No. 1, Centre for Southeast Asian Studies, Northern Territory University, Darwin, pp. 13–24.
- Fox, James J. (1998), 'Shoals and reefs in Australia-Indonesia relations: traditional Indonesian fishermen', in A. Milner and M. Quilty (eds), Australia in Asia: Episodes, Oxford University Press, Melbourne, pp. 111–39.
- Fox, James J. (2000), 'Maritime communities in the Timor and Arafura region: some historical and anthropological perspectives', in S. O'Connor and P. Veth (eds), East of Wallace's Line: Studies of the Past and Present Maritime Cultures of the Indo-Pacific Region, A.A. Balkema, Rotterdam, pp. 337–56.
- Fox, James J. (2008), 'From one coast to the other: episodes in the history of relations between the coasts of Indonesia and Australia', plenary paper presented to the Coast to Coast Conference, Darwin, 18–22 August.
- Fox, James J. and Mark Meekan (2006), 'The shark species targeted and caught by Indonesian fishermen in Australian waters', report for the Australian Fisheries Management Agency, Canberra.
- Fox, James J. and Sevaly Sen (2002), 'A study of socio-economic issues facing traditional Indonesian fishers who access the MOU Box', report for Environment Australia, Canberra, October, available at http://rspas.anu.edu.au/ people/personal/foxxj_rspas/Fishermen_MOU_BOX.pdf.
- Fox, James J., Dedi S. Adhuri, Tom Therik and Michelle Carnegie (2009), 'Searching for a livelihood: the dilemma of small-boat fishermen in eastern Indonesia' in B. Resosudarmo and F. Jotzo (eds), Working with Nature against Poverty: Development, Resources and the Environment in Eastern Indonesia, Institute of Southeast Asian Studies, Singapore, pp. 201–25.

²⁴ The Research School of Pacific and Asian Studies at the ANU was involved in one of these projects. It promoted the development of seaweed cultivation to establish an alternative income steam for fishing communities on Rote and experimented with sponge cultivation trials in the Bay of Kupang as another possible livelihood enterprise.

- Horridge, Adrian (1979), The Lambo or Prahu Bot: A Western Ship in an Eastern Setting, Maritime Monographs and Reports 39, Trustees of the National Maritime Museum, Greenwich.
- Macknight, C.C. (1976), The Voyage to Marege: Macassan Trepangers in Northern Australia, Melbourne University Press, Melbourne.
- Mellefont, Jeffrey (1988), 'Australian National Maritime Museum', Indian Ocean Review, 1(4): 3, 21-4.
- Mellefont, Jeffrey (1991), 'Between tradition and change: an Indonesian perahu in an Australian collection', Great Circle, 13(2): 97–110.
- Resosudarmo, Budy, Lydia Napitupulu and David Campbell (2009), 'Illegal fishing in the Arafura Sea', in B. Resosudarmo and F. Jotzo (eds), Working with Nature against Poverty: Development, Resources and the Environment in Eastern Indonesia, Institute of Southeast Asian Studies, Singapore, pp. 178–200.
- Russell, Barry C. and Lyle L. Vail (1988), 'Report on traditional Indonesian fishing activities at Ashmore Reef Nature Reserve', report for the Australian National Parks and Wildlife Service, Canberra.
- Stacey, Natasha (1992), 'The *Tujuan*: the study of the material culture of an Indonesian fishing vessel held in the collection of the Northern Territory Museum of Arts and Sciences', Graduate Diploma thesis, James Cook University, Townsville.
- Stacey, Natasha (2007), Boats to Burn: Bajo Fishing Activity in the Australian Fishing Zone, Asia-Pacific Environment Monograph 2, ANU E Press, Canberra, available at http://epress.anu.edu.au.
- Wallace, Alfred Russel (1869), *The Malay Archipelago*, Volume 2, Macmillan, London, reprinted in 1986 by Oxford University Press.

13 FLUID BOUNDARIES: MODERNITY, NATION AND IDENTITY IN THE RIAU ISLANDS

Michele Ford and Lenore Lyons

The Indonesian language equivalent for the word 'fatherland' ... is 'tanah air' meaning 'land-water', thereby indicating how inseparable the relationship is between water and land to the Indonesian people. The seas, to our mind, do not separate but connect islands. More than that, these waters unify our nation (Indonesian delegation to UNCLOS III, cited in Puspitawati 2005: 2–3).

The archipelagic concept (wawasan nusantara) has been central to Indonesian nation building, because the concept of Indonesia is predicated on clear territorial boundaries that encompass both land (tanah) and water (air). This concept was first articulated through the Juanda Declaration of 1957 (see Chapter 2 by Butcher) and received further legitimacy when Indonesia's status as an archipelagic state was recognized under the United Nations Convention on the Law of the Sea (UNCLOS). Whereas the concept of archipelagic statehood is concerned with ensuring national territorial integrity (that is, it is outwardly oriented), wawasan nusantara is focused on the internal dynamics of national integration in an archipelagic nation characterized by ethno-linguistic diversity. The archipelagic concept and the archipelagic state are nevertheless intrinsically connected, as each relies on the other for its legitimacy. Fundamental to both is the view that the sea unites Indonesia's islands and the people living on them. This idea is expressed in comments such as laut adalah perekat kepulauan Indonesia (the sea is the glue of the Indonesian archipelago) (Adhuri 2003: 4). In other words, the seas located within the territorial baselines that surround the archipelago draw the people of Indonesia together to form one, united nation, just as the international maritime