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# **Small-scale Fisheries** in Japan

Environmental and Socio-cultural Perspectives

edited by Giovanni Bulian and Yasushi Nakano





Small-scale Fisheries in Japan

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> Giovanni Bulian Yasushi Nakano

#### **Small-scale Fisheries in Japan**

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#### Introduction

The aim of this collection of articles is to cover a wide range of interdisciplinary issues related to small-scale fisheries in Japan. These fishing activities still tend today to be firmly rooted in local communities representing a form of economic activity that reflects the richness of an extremely varied fishing culture, ethical values, management strategies and local knowledge.

Despite there is no universal definition of 'small scale-fisheries' (Berkes et al. 2001, 8), in this book, the term must be contextualised as a series of particular fishing activities that "usually require only small capital investment, use low technology gear and vessels (often non-motorised) and catch fish for subsistence or local markets" and that is "characterized as a dynamic and evolving sub-sector of fisheries employing labour-intensive harvesting, processing and distribution technologies to exploit marine and inland water fishery resources. The activities of this sub-sector, conducted full-time or part-time, or just seasonally, are often targeted on supplying fish and fishery products to local and domestic markets, and for subsistence consumption" (Staples, Satia, Gardiner 2004). This kind of activities are also often based in small coastal and island communities that depend on local resources that can be affected by local activities (Berkes et al. 2001, 11).

In Japan, however, although small-scale fisheries are a dynamic community-based sub-sector, when looking for a clear definition on what they exactly are, there are some difficulties because there are various definitions in Japanese legislation. As Kaneda summarises: "Japanese fisheries fall under several classes quite different in technological development, from a large number of coastal small-scale fisheries run primarily by family labors to the latest, large-scale, fully equipped few" (2005, 6). Delaney and Yaqi have observed that "there is no legal definition of small-scale fishing [...], but for the purpose of fisheries production statistics, fishing boats smaller than 10 gross tons are recognized as coastal fishing vessels and also as small-scale fishers in Japan" (2017, 315; see also Makino 2011, 6-8). In the attempt to provide a commonly accepted definition, in this book 'small-scale fisheries' in the context of Japanese fisheries are referred to fishing activities carried out with small boats, which have a very small crew (usually one or two people) and which operates mainly in coastal areas and almost always in territorial waters. Moreover, smallscale fisheries are also specialised with some division of labour (fishing unit) with medium to low investment whose disposal of catch is generally

organised on local sale with significant consumption of the operator or the local fishing community.

Using different methodological approaches, the book covers a diverse range of topics related to community-based fisheries: environmental management of coastal areas, local practices of allocating fishing spots by lottery, fishing livelihoods, environmental threats or historical destructive fishing techniques, gender and entrepreneurship and, more generally, socio-cultural issues focused on the critical strategies adopted to strengthen or improve local economies of fishing communities. Topics covered in this volume therefore highlight some of the major socio-economic and cultural characteristics of the small-scale fisheries that could be ideally defined as 'internal' to the Japanese fishing communities.

The book also contributes to the currently debates concerning the need to reconsider the cultural and economic role of this fishing sector. Studies on small-scale fisheries, if compared to the various fisheries research areas, has been a marginal theme for a long time becoming only in recent times an object of theoretical interest (Akimichi 1996; Jentoft et al. 2017). A further factor to consider is also that small-scale fisheries could continue nowadays to make an important contribution to the development of a research agenda to address identified information gap for fisheries policy (Staples, Satia, Gardiner 2004, 12), offering also theoretical challenges that can be of interest to anthropology and to disciplines that make use of bio-economic and cultural approaches to the study of fisheries (Pauly 2006a 2006b; Colburn, Abbott-Jamieson, Clay 2006). In this context, the extremely varied cultural heritage of Japanese small-scale fisheries has become then part of the current debates focused on the necessity of re-contextualizing the role of small-scale fisheries in a global perspective (Stoffle 2001; Béné 2006; Ingles et al. 2007; Delaney, Yagi 2017).

The book attempts various thematic paths, which open a very wide range of approaches and different perspectives, depending on the methodological choices, temporal context and the selection of the topics. In the first chapter, Taku Iida focuses on the use of explosive material during the postwar period in the Southwestern Archipelago immediately after World War 2, bringing about stimulating perspectives on both modern history and fisheries management in Japan. The author reconstructs the general conditions of this fishing technique, now prohibited, in coastal villages in the Southwestern Archipelago as a step to clarify the farther details of fishing innovation on individual base. The chapter is structured in three parts: a review of published records of this type as well as oral testimonies collected by the author's research, a detailed analysis of the Iriomote Island's case, where non-fishers used explosives to set off against their lack of skill and gears and, finally, a detailed analysis of the Kohama Island's case, where full-time fishers used explosives in many strategical ways according to target species. According to the author, people with experience of "dynamite fishing" generally hesitate to tell their story probably because of a sense of guilt. However, their story uncovers many characteristics of fishery that cannot be observed anymore in Japan: famine relief, boom industry, and nevertheless requirement of practical knowledge through experience.

In the following article, Mitsutaku Makino and Kumi Soejima examine the development of fisheries women entrepreneurship groups in the Japanese marine products distribution sector. In particular, they discuss strategies adopted by women's groups in fishery cooperative associations (FCAs), who live in fishing communities and conduct economic activities using local resources centred on fishery products. According to the authors, central to the analysis of the role of women in entrepreneurial activities is the case of the Sanmi Sea Mothers, who are active in the Sanmi community located in the town of Hagi (Yamaguchi Prefecture). Examining their historical evolution, the authors subdivided their economic activities into three main periods (1996-2005; 2006-2007 and 2008-2010) in order to show how fishery women's entrepreneurship could play a significant role to communicate the cultural value of fishing communities to local people as well as the general consuming public.

Tetsuo Yanagi's contribution consists in a critical review of the activities of fishermen who are members of the Hinase Fishermen's Union in the Seto Inland Sea. In particular, the author focuses on the environmental *engagement* of the local fishermen in restoring of the areas of eelgrass beds, which were decreased in the coastal area from the early '60s, mainly because of water pollution and other meteorological factors. The author then highlights how the initiative of the Hinase fishermen in the voluntary activities for the cleaning and the collection of seabed debris, with the aid of national government funding, has brought great improvements on the environmental and economic level.

Shūichi Kawashima's article focuses instead on fishing grounds to be determined by lottery. Given that existing studies of early-modern and modern fishing maps from across Japan have not examined how they were used by fishermen, the author focuses on the practices of 'fishing with kuji''  $\mathfrak{F}$  (lottery) to determine the use of a fishing area. The chapter focuses primarily on coastal areas of the eastern Kii Peninsula, where diverse fishing methods are used by local communities (gill nets and four-armed scoop nets). In these areas, fishing lotteries, whose origin is religious, have been developed to be used during fishing seasons. The contribution of the author, therefore, demonstrates how kuji is a culturally sophisticated method to ensure the equal distribution of fishing opportunities, a strategy born from a view of a world in which fishers are constantly subject to the harsh whims of nature.

In the next chapter, Yasushi Nakano focuses on the issue of the endurance and the transformative dynamics of the folk festivals that take place in a fishing community. To this day, Japanese fishery and fishing communities are asked by government for multilateral functions rather than

only fishery production, the author focuses on the question of how fishing villagers perform the folk festival. Tracing diachronically the critical processes of change of a long-established folk festival, the author takes the endurance and the transformation of the traditional boats of Tamaeura as a case study (Hagi city, Yamaguchi Prefecture). Secondly, considering the causes and conditions that effect the endurance and the transformation, the author also sheds light on the powers between the fishing community and government, discussing also the framework of Japanese fishery, which is mediated at local (fishing community) and national level (government).

Johannes Wilhelm, instead, examines some of the main critical consequences of the nuclear disaster following the Tohoku earthquake and tsunami on 11 March 2011. Even before disaster struck, the Tōhoku region has been regarded an epitome of a structurally weak region where the process of depopulation and aging combined with a traditional economy based on agriculture, forestry and fisheries, a fact that can be underlined by looking at the locations of nuclear power stations such as Fukushima I & II, Onagawa, Higashidori or Oma. Depopulation and dropping numbers of fisheries population came apparent long before disaster struck and the disaster accelerated this trend distinctly. After disaster, a large part of the coastal population moved from shelters to temporary housings (kasetsu) to wait for completion of residential areas on higher ground. However, findings from recent population data (13th Fisheries Census of 2013 and local statistics) show that micro-level migration increased significantly due to temporary resettlement, but also a structural change in local economy (from fisheries to construction work) occurred in the aftermath of disaster. It is highly questionable if the resettled population will move back to their former places (i.e. remote settlements) in near future. Another aspect of this problem is how to cope and overcome this kind of socially induced vulnerable state for the continued existence of coastal communities, where social bonds gradually fall apart. Based on observations conducted during the past 15 years, the author discusses then the vulnerability of communities in Pacific Tohoku induced by social factors such as depopulation and shrinking. At the same time, the author analyses the strategies chosen by affected residents to cope with such a situation and how conflicts evolve and become settled in contemporary small-scale fisheries communities.

Returning to the topic previously examined by Yasushi Nakano, the last contribution of the book examines some issues of festival management that are related to the transformation of the local institutions and to the power relations among the various local leaders of Kamishima (Mie Prefecture). Specifically, Giovanni Bulian provides an anthropological overview of the critical processes of empowerment and disempowerment of ritual leaders in the context of a winter festival that takes place during the New Year's Eve, whose management and celebration represent an important catalyst for local leadership. Therefore, the article will explore the balance of pow-

er between the director of the local fishing association who is connected to the 'new' institutional system introduced in Kamishima (neighborhood associations and fishing cooperative association) and the head of the religious ceremonies, traditionally elected by the three historical local districts of the fishing community. According to the author, these two ritual leaders can act as mirror reflecting the particular characteristics of the radical transformations of the local organisational systems.

#### **Bibliography**

- Akimichi, Tomoya (1996). "Introduction". Akimichi, Tomoya (ed.), *Coastal Foragers in Transition*. Ōsaka: National Museum of Ethnology, 42, 1-9.
- Béné, Christophe (2006). Small-Scale Fisheries. Assessing Their Contribution To Rural Livelihoods In Developing Countries. Roma: FAO Fisheries Circular No. 1008 FIPL/C1008.
- Berkes, Fikret; Mahon, Robin; McConney, Patrick; Pollnac, Richard; Pomeroy, Robert (2001). "Introduction". Berkes, Fikret; Mahon, Robin; McConney, Patrick; Pollnac, Richard; Pomeroy, Robert (eds.), Managing Small-scale Fisheries. Alternative Direction and Methods. Ottawa: International Development Research Centre, 1-17.
- Colburn, Lisa; Abbott-Jamieson, Susan; Clay, Patricia (2006). "Anthropological Applications in the Management of Federally Managed Fisheries. Context, Institutional History, and Prospectus". *Human Organization*, 65(3), 231-9.
- Delaney, Alyne; Yagi, Nobuyuki (2017). "Implementing the Small-Scale Fisheries Guidelines. Lessons from Japan". Jentoft et al. 2017, 313-2.
- Haggan, Nigel; Neis, Barbara; Baird, Ian G. (eds.) (2007). Fishers' Knowledge in Fisheries Science and Management. Paris: UNESCO. Coastal Management Sourcebooks 4.
- Ingles, Palma; Sepez, Jennifer; Kedia, Satish; Wallace, Tim (eds.) (2007). Anthropology and Fisheries Management in the United States. Methodology for Research. Hanover: Sheridan Press. American Anthropological Association, Napa Bulletin 28.
- Jentoft, Svein; Chuenpagdee, Ratana; Barragán-Paladines, María José; Franz, Nicole (eds.) (2017). *The Small-scale Fisheries Guidelines Global Implementation*. London: Springer. MARE Publication Series 14.
- Kaneda Yoshiyuki (2005). Fisheries and Fishing Methods of Japan. Tōkyō: Seizandō.
- Makino, Mitsutaku (2011). Fisheries Management in Japan. Its Institutional Features and Case Studies. London: Springer.
- Pauly, Daniel (2006a). "Major Trends in Small-scale fisheries, with Emphasis on Developing Countries, and Some Implications for the Social Sciences". *Maritime Studies*, 4(2), 7-22.

- Pauly, Daniel (2006b). "Rejoinder. Towards Concilience in Small-scale Fisheries Research". *Maritime Studies*, 4(2), 47-5.
- Schnell, Scott, Hashimoto, Hiroyuki (2002). "Guest Editors' Introduction. Revitalizing Japanese Folklore". Asian Folklore Studies, 62(2), 185-94.
- Staples, Derek; Satia, Benedict; Gardiner, Paul R. (2004). *A Research Agenda for Small-scale Fisheries*. Bangkok: FAO Regional Office for Asia and the Pacific.
- Stoffle, W. Richard (2005). *Understanding the Cultures of Fishing Communities*. A Key to Fisheries Management and Food Security. Roma: FAO Fisheries Technical Paper 401.
- Wilhelm, Johannes (2003). "Traditional Ecological Knowledge in the Beliefs of Japanese Fishing Villages. With Special Reference to Yoriiso (Miyagi) and the Sanriku Region". *Japanese Religions*, 30(1-2), 21-53.

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#### Use of Explosives in the Southwestern Archipelago Immediately after World War II

Taku Iida (National Museum of Ethnology, Osaka, Japan)

**Abstract** Immediately after the Fifteen Years' War with the US, China, and colonizing states of Southeast Asia, the Japanese suffered from general shortage especially food, which got worse when the repatriates from Taiwan, Micronesia, Southeast Asia and Manchuria began their new life in Japan. To make their living, both former occupants and newcomers employed all means, among which use of explosives or 'dynamite fishing' near the coast. This technique is now prohibited to protect fishing grounds, but the emergent economic and social conditions let the people show the generosity to overlook it. The paper reconstructs the general conditions of this fishing in coastal villages in the Southwestern Archipelago as a step to clarify the farther details of fishing innovation on individual base.

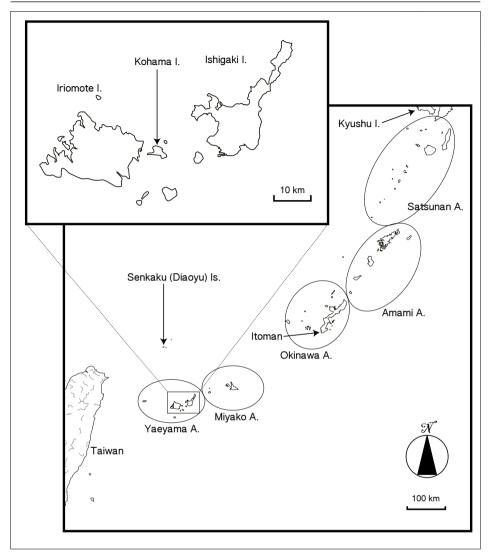
**Summary** 1 Introduction. – 2 Published Records of 'Dynamite Fishing'. – 3 Outline of the Fishing Method. – 4 Research Methods. – 5 Diversity of the Actors: Evidence from Research in Iriomote. – 6 Diversity of the Method: Evidences from Research in Kohama. – 7 Conclusion.

**Keywords** Blast Fishing. Yaeyama Archipelago. World War II.

#### 1 Introduction

In the aftermath of 15 years of war with the USA, China, and the nations that had colonized Southeast Asia, the Japanese suffered from general shortages of all essential goods, but especially of food. Food shortages worsened when Japanese former settlers were repatriated from Taiwan, Micronesia, Southeast Asia and Manchuria and began their new life in Japan. To make a living, both the original occupants and newcomers employed many methods of fishing near the coast, including the use of explosives (commonly known as 'dynamite fishing'). To protect fishing grounds, the use of explosives is now prohibited, but under the severe economic and social conditions prevalent after the war their use was tacitly permitted.

The general conditions of blast fishing in coastal villages of the Ryukyu Islands are reconstructed in this article, focusing on the Yaeyama Archipelago (map 1). The five archipelagos of Satsunan, Amami, Okinawa, Miyako, and Yaeyama, which lie between Kyushu and Taiwan, are known as the



Map 1. Yaeyama Archipelago

Ryukyu Islands, but in Japanese the term Nansei Shotō (lit. 'Southwestern Archipelago') is used more frequently. An additional complication is that the toponym 'Okinawa' is applied at three different geographical levels. It refers to the main island of the Okinawa Archipelago, to the entire archipelago, and to the three archipelagos that present-day Okinawa Prefecture includes, i.e., Okinawa, Miyako and Yaeyama. However, the Yaeyama Archipelago, the focus of this paper, is more than 400 km southwest of Okinawa Island.

Contemporary blast fishing is reported most frequently from Southeast Asia (Pet-Soede, Erdmann 1998; Pet-Soede, Cesar, Pet 1999; Akamine 2006), as well as Hong Kong (Cornish, McKellar 1998) and continental Africa (Jiddawi, Öhman 2002; Cinner 2010). All these works admit, considering environmental ethics, the negative aspect of blast fishing that destroys coral reefs and fish habitats (Fox et al. 2003). However, they share a tendency to ignore diversity of this type of fishing, either because they are based on a single case or because they oversimplify the diversity of this fishing. Focusing on historical blast fishing, this article demonstrates the diversity of the actors who fished with explosives and the variety of methods that were employed.

The objective of this paper, documenting an aspect of fishing with explosives, is so restricted that the place and period are specified narrowly. However, it leads toward several broader topics, namely arms in society, the combination of modern items into a subsistence system, innovation in fishing and its sustainability, and the role of a boom industry in economic growth. On the other hand, one important rationale for conducting the research is the reticence or even unwillingness that its former practitioners exhibit about the topic, undoubtedly because of its illegal and therefore illicit character. However, because a half-century has already passed since fishing with explosives ended in the region under study, its former practitioners would forever keep silent were broad scale research not organized quickly into a major project. Therefore this paper elucidates the relevance of such a 'dark side of history', and it explains the need for collaborative joint research and information sharing regarding this topic.

The paper consists of three parts. The first one outlines this type of fishing from published records and fragmented oral testimony collected during the author's research. The second is a detailed analysis of the case of Iriomote Island, where non-fishers used explosives to off-set their lack of both skill and fishing gear. In this example explosives were a means to expand the capacity of the sea as a place of production. The third is a detailed analysis of the case of Kohama Island, where fulltime fishers used explosives in many different ways according to target species. For example, mullet (*Mugil* sp.) was killed by the blast, whereas fusiliers (*Caesio* sp.) were just rendered quiescent, for selling as live bait for bonito fishing. In the latter case fishers simulated fish and fish school behaviour, and controlled it with explosives.

#### 2 Published Records of 'Dynamite Fishing'

The earliest records on the use of explosives in fishing are found in newspapers. The *Ryukyu Shimpō* on 17 September 1901 published a reader's opinion that Itoman fishers used explosives throughout Okinawa, despite a prefectural ban. Itoman is a toponym in the south of Okinawa Island, and its fishers are famous for the remarkable expansion of their activities through the first half of the twentieth century (Ueda [1975] 1991; Ichikawa 2009). Equipped with newly-invented water goggles and large nets, as well as a labour recruiting system of mortgaging a debt (*Itoman-gai* or Itoman purchase [of labour]), the area of their drive-in-net expanded to Central Honshu, Taiwan, Micronesia and insular Southeast Asia. In 1882, the first Itoman family migrated to Ishigaki and began to sell fish that they speared (Noguchi 1987, 293). In 1907, 11 of 17 groups that conducted drive-in-net from Ishigaki Island of the Yaeyama Archipelago were based in Okinawa (Ichikawa 2009, 118). At the time of the newspaper article, it was supposed that many Itoman fishers had already migrated seasonally to Ishigaki.

Nothing can be said regarding the popularity of the use of explosives in Okinawa during this period. It was only in 1866, less than 40 years before the newspaper article, that Alfred B. Nobel invented dynamite using a combination of diatomaceous earth and nitroglycerine. In 1875 Nobel improved its effectiveness by replacing diatomaceous earth with nitrocellulose. And this was a quarter of a century before the newspaper article. Such a rapid diffusion of explosives might be explained by the 1894 Sino-Japanese War, the first modern war engaged in by the Japanese government. With the end of the war, by the Shimonoseki Treaty of 1895, Japan began to colonize Taiwan. Its inhabitants resisted. This tense atmosphere between Taiwan and mainland Japan might have initiated the permeation of explosives into Okinawa, which is situated between the two. As the army transported dynamite from the mainland Japan to Taiwan, it is quite possible that some of it entered the black market in Okinawa. However, such a hypothesis requires verification by further research.

Reports are few, particularly before World War II, on the use of explosives in fishing. However, according to the author's interviews at several sites throughout the Ryukyu Islands, either soldiers themselves used explosives for fishing, or they gave explosive to professional fishers to secure food for their troops (a case from Yaeyama is reviewed below). Such military food security was, in some places at least, apparently the beginning of the use of blast fishing.

Fujio Ueda ([1975] 1991) points out in his essay on history of Okinawan fisheries that the commercial network for explosives had been established before World War II. Explosives were introduced via this network by several actors: thieves, explosive merchants themselves, and those involved in construction and mining businesses. A pack of dynamite, containing

50 sticks of the substance, 100 blasting caps, and 15 m of fuse, cost 6.50 yen¹ in the 1910s. This was the official price whereas it cost six times more when a package was subdivided for sale on the black market. This information was based on interviews with those involved, although Ueda did not identify his sources.

Judging from published modern history and journalism reports, explosives were used most frequently just after World War II, when disarmament was being conducted by the US Army and immediate food security was a severe issue for all citizens. Masaie Ishihara, a writer who described the general public's wartime experiences, points out that explosives were used by fishers who had lost their means for production by having been drafted into the military and having been bombed out. However, "it was a most dangerous way to make a livelihood. Many people killed themselves accidentally, although all of them survived the smoke of guns and a rain of bullets miraculously" (Ishihara 1982, 269). Elsewhere in the same book (252), Ishihara states that most smugglers going to Hong Kong were armed with explosives for self-defense.

None of the published materials mentioned above, however, provides details on social backgrounds. In particular nothing was mentioned about the ways of acquiring explosives, the situation that facilitated their circulation, or fishers' actual status. More often than not, invaluable testimonies on the use of explosives have been interpreted as an abnormal experience during wartime (Sakai 1990; Kobayashi 2003; Nakamura 2003; Imamura 2003). As a result, most authors pay attention only to sensational aspects, and omit important details.

It is necessary to examine newspaper articles more closely to further elucidate the history of blast fishing. However, the writers were usually too interested in 'abnormality' of the fishing, especially illegality and numbers of dead or injured, to make historical contributions by documenting the incident's social contexts. The least documented aspects of the topic, including the acquisition of explosives, specific motives for using them, and folk knowledge regarding use, remain to be examined.

- 1 Before the inflation that occurred during the Fifteen-Year War (1931-1945), two yen were almost equivalent to one US dollar, and one gram of pure gold cost 1.5 yen. In the 1910s, a policeman started his career at the salary of 15-20 yen (Asahi Weekly Magazine 1988).
- 2 This tendency occurs also in the recently-published works of the Association for Documentation of the Senkaku Islands (2012, 2014). These works, however, demonstrated that significant numbers of Okinawan (not Yaeyaman) fishers went as far as Senkaku or Diaoyu Islands, situated more than 400 km from Okinawa, and now the subject of a border dispute between Japan and People's Republic of China, to fish with explosives. This implies that Okinawans (notably Itoman fishers) avoided, at least during a certain period, using explosives in their home waters. That implies that blast fishing was probably regarded as neither a necessary evil for livelihood nor a criminal act, but as a means of obtaining a large amount of money. This hypothesis should be tested through future research.

Another remarkable article, which examined the end of blast fishing in the Ryukyu Islands and Southeast Asia (Kakuma 2008), reported its conclusion in Yaeyama. It explains that immediately after the US occupation ended, in 1972, the Japanese Coast Guard conducted an exposure, which successfully eliminated this kind of fishing. This article is regarded as the only academic work using historical documents, but it provides too few details. From where did fishers obtain explosives? Did they conduct this method occasionally or regularly? If done regularly, what was the periodicity of the activity? How severe was the exposure? How did the fishers respond to it? Was fishing with explosive regarded as a necessary evil and used by the majority of fishers, or was it seen as an antisocial livelihood activity for just a minority?

This article does not attempt to provide general answers to these questions. However, through dialogue with former practitioners of blast fishing, it does provide more detailed primary materials than have been available hitherto. In this way it also clarifies a limited type of fishing conducted from the period from Japan's defeat in World War II to the reversion of the Ryukyus to Japan in 1972.

#### 3 Outline of the Fishing Method

Since the author's field research on fishing with explosives is still on-going, it cannot be said that a detailed picture is clear. However, a general picture will be outlined based on research so far conducted, in order that readers can better understand the cases presented below.

The author uses the term "fishing with explosives" or "blast fishing" rather than "dynamite fishing", which is more popular in Japanese publications, because not only dynamite is used. Dynamite is an explosive that includes nitroglycerin and nitrocellulose as its principal components, and once used frequently for blasting in the construction and mining industries. At present, although the blasting explosive is customarily referred to as "dynamite", it is ammonium nitrate fuel oil (ANFO), not dynamite.

In addition, other blasting explosives have been employed for fishing, including hand grenades and homemade explosive extracted from artillery shells or marine mines. To include such cases the author has adopted the expressions "fishing with explosives" and "blast fishing" without referring to a particular kind of chemical. This also avoids the frequently used mass media term which inevitably connotes illegality.

According to the author's interviews, the kinds of explosive used were of various colours, including white, gray, yellow, and other. They also varied in shape, with some being rectangular, like explosives made specifically for the construction industry, whereas others were powdered or appeared like aggregated grain. Their chemical composition is not identified. According

to the participant fishers' explanations, dynamite in a strict sense of the term was also probably used.

Explosives were not used without a container, a fuse, and a blasting cap.<sup>3</sup> As an explosive disperses readily in water, it must be either bottled or wrapped with waterproof paper. A fuse is required to maintain the fire while a fisher is either manipulating or throwing the explosive. The fire is transmitted from the fuse to the blasting cap, which causes an explosion by igniting the main body of the explosive.

The fuse and blasting cap were packed together with the main body when ready-made 'dynamite' was purchased. If not, the user had to make them for himself. A waterproof paper wrapping could be replaced with leaves (see below). Whether a fisher used ready-made or homemade explosives, this method of fishing required prudence and skill to gauge the precise timing of an explosion.

Some fishers used fishing nets to retrieve their quarry, although most did not. Informants in most interviews made by the author noted that fishers, whether professional or not, dived underwater to retrieve their fish by hand, an activity that risked attracting sharks that had been already lured by the fish blood. Often a fisher had to retreat without being able to retrieve his fish. Some retired fishers related that the main reason for loss of body parts was not a premature explosion, but shark attack.

#### 4 Research Methods

The evidence demonstrated below is based on interviews the author conducted in November 2013 on Kohama and Iriomote islands in the Yaeyama Archipelago. Since 2001, Kohama has been the location of the author's long-term research. He learned of fishing with explosive only incidentally during the research on the modern fishery. In the 2013 research, therefore, he did nothing more than verifying with an acquaintance the details of the use of explosives, and the research covered only one case. Nevertheless, because the information collected then was detailed and realistic, the author asked the informant to agree to their publication.

Only few cases were collected in Iriomote also. Unlike on Kohama, the author visited several people on Iriomote, with no clear idea of who he would be able to interview. In a two-days research trip the author was guided by Hidenobu Itai, who had conducted field research on artisan boat building on Iriomote. He introduced the author to some of his informants, most of whom agreed that blast fishing was conducted from time to time

**<sup>3</sup>** Both blasting caps and fuses were filled with explosive. In this point, a fuse is fundamentally different from the wick of a candle, and it is the reason that the fire is difficult to extinguish even when thrown into the sea.

just after World War II.

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The informants related one of the two contradictory versions regarding blast fishing: either "Iriomote islanders did use explosives to catch fish" or "it is fishers from Ishigaki Island who did it, and Iriomote non-fishers were not involved in it". There are two ways of explaining this inconsistency. One explanation stresses that there are few eyewitnesses because of the irregular, rare and short-term essence of this kind of fishing. The second stresses the islanders' tendency to conceal their neighbours' 'violation' of the law by underestimating Iriomote people's involvement. Whereas the research reported here could not determine which explanation predominates on Iriomote, both should be considered in every interview about blast fishing.

It is asserted in the following section that Iriomote islanders did use explosives to catch fish. It thus contradicts some other assertions that sustain the alternative view. However, for the two reasons mentioned above, it is natural that there are contradicting assertions. The one that follows is trustworthy not only because of its detailed and realistic description, but also because of the informant's demonstrated sincerity. When the author asked him to permit publication of his story, properly anonymised, the informant required the author to relate it as a tragic result of the war and the consequent food shortage. This informant, an avid relater of wartime experiences, kept an artillery shell and his own military boots at home. To him, fishing with explosives is a historical and unforgettable fact, if not exactly legitimate.

To prevent misunderstandings on his part, the author made complementary interviews on both islands in December 2015 with the same informants that were used in 2013, showing them the draft of this article to clarify some ambiguous details. On this occasion, the author asked his informants to correct the expressions he had used in writing it, and to agree that a part of the informants' own past would become regarded as the author's own writing when published.

#### 5 Diversity of the Actors: Evidence from Research in Iriomote

Blast fishing started in Iriomote before World War II. According to the informant, born in 1929, farmers from several villages used to gather in 1937-38 to fish with explosives at the river mouth of one of the island's largest river. The explosive material, called *sakuramaito* or sacramyte, was traded informally from a nearby coal mine that had just opened. The composition of sacramyte is not identified. The fishers retrieved fish, dead or dazed, using their hands, but not a net.

This fishing sometimes caused accidents. An inhabitant of another village, just on the other side of a small stream close to the informant's vil-

lage, was injured seriously during the fishing operation, and was obliged to have both hands amputated. Because he mistakenly thought that the explosive he threw into the water had misfired, he dived into the water immediately before the explosion. Use of explosives were not blamed then. On the contrary, there were many fishers from different villages fishing with explosives. Because most were farmers and did not possess fishing nets, throwing explosives may have been the easiest way for them to catch fish. In other words, using explosives was nothing special. Nevertheless, the fishing ground was not severely destroyed before the war, possibly because the frequency of blast fishing was limited. According to the informant, it was fishers from Miyako Archipelago who blasted and destroyed the fish habitat after World War II. Although Miyako islanders were good at sea fishing, but not in the river, blasting in the river was easier, according to the informant, because fishers did not have to compete with sharks.

Around 1942, the informant enlisted in the 18th regiment, the Fourth Division of the Japanese Army<sup>4</sup> and moved to Ishigaki Island. The army then stationed a part of this regiment in Ishigaki, to back up posts in the Mariana Islands. The regiment consisted of 9,000 soldiers, 3,500 of which were stationed in Ishigaki and 5,500 in Okinawa. During the informant's service, some soldiers of his company worked for a fishing squad, using explosives to supplement their meagre rations. The informant himself also saw his senior ordering soldiers to extract explosive from a 15 cm artillery shell. Probably, they did not use nets. They caught large fish like *chinuman* (sea bream, *Acanthopagrus* sp.),<sup>5</sup> but all were eaten by their superiors. The informant remembers even now that there was nothing in the soup on that day.

These anecdotes inform us that: 1) the army took the initiative in fishing with explosives, despite the danger of the activity; 2) non-fishers played a significant role in the operation; 3) there was not just a single means of acquiring explosives, as the farmers along the river used that obtained from a coal mine whereas Ishigaki soldiers extracted explosive from artillery shells. Such information cannot be obtained from published materials, such as newspapers and academic articles.

When the war ended, in 1945, the informant returned to his home in Iriomote. It was only after the war ended that he witnessed fishing with explosives. The first time was on occasion of 'disarmament', when habit-

- 4 The number of the regiment and the division is based on the informant's testimony, but not confirmed by the author.
- **5** While *chinuman* usually refers to *Naso unicornis* (*tenguhagi* in standard Japanese) in Yaeyama as well as in Okinawa, the informant explained repeatedly that it is identical to *minamikurodai* (standard Japanese), which corresponds to *chinu* (Okinawan) and *Acanthopagrus sivicolus* (scientific name). The informant was apparently confused, but the author left this 'mistake' uncorrected respecting the informant's understandings.

ants of neighbouring villages were required by the US Army to dispose of the defunct Japanese Army's food and ammunition. Then, villagers found a marine mine that had drifted ashore. Two former Japanese Army sergeants dismantled it to extract the explosive. The informant watched this work from a distance, fearing an accidental explosion. The work was successful, and the two subsequently fished with the explosive the color of which was a *miso*-like yellow. This material, as well as a fuse, was wrapped with a *kuwazuimo* (taro, *Alocacia* sp.) leaf, and bound together with string, to form it into an explosive device. They did not have a blasting cap, but made a substitute with a small paper cylinder containing powder scaled from match heads. The resultant blast was so strong that some fish flew onto the land! The left over explosive was put into a rice sack and buried in the mountains.

Sometime following the 'disarmament', the informant gave a friend some hand grenades which he had found. This friend used them for fishing and the informant received in return *bora* (mullet, *Mugil* sp. and other *Mugilidae* species) which formed part of the harvest. Because this fish forms large coastal spawning aggregations, it was assumed that the fisher threw the hand grenade after visual confirmation. Meanwhile, the sergeants continued fishing with explosives. One of the two returned home to Honshu, whereas the other married a woman in the informant's village. He not only used the explosive buried in the mountains, but also extracted additional explosive. Subsequently he died in an explosion when he hammered an artillery shell and accidentally hit a detonating fuse. According to the informant's recollection, this was before the end of 1945, the year of Japan's defeat.

There were people who fished with explosive in the sea to provide shrine offerings on the occasion of a festival. Although the food shortage had not yet been overcome, nevertheless the festival had to be celebrated. In such a difficult condition, the people were fortunate to obtain some explosive material. Whereas people fished in the river when they felt ashamed to use explosives, on this occasion of a public event they fished at sea, in that way to share in the process. As a result, the fishing assumed the emotions of a festive event. The informant was watching it from a distance in the water. He observed the one-metre-high column of water that arose at the moment of the explosion, and felt a sharp pain on the skin because of the blast. The harvest consisted of *chinuman*, *budai* (parrot fish, *Scarus* sp. and other *Scaridae* species), and the like. This time, too, sharks gathered to eat the dead fish.

The informant's story continued. The following account of a death caused by an explosion happened when "life had already settled down",

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<sup>6</sup> Miso is a soybean paste used to season soup.

supposedly in the 1950s. A man from the informant's village and another from the village beyond the stream fished together with explosives. The one from beyond the stream had worked in a gold mine in Taiwan and, according to the informant, possibly had a route via which to acquire explosives. One man lit the fuse with an incense stick, but the flame was too dim to be seen in the daylight. As a consequent, the one having lit it did not throw the explosive and was killed by its explosion. The other was injured and went to hospital. When the informant heard about this tragedy he rushed to the location where he observed that the body had been eviscerated and that hermit crabs were swarming all over it. This was the informant's only experience of seeing death or injury from an explosion.

The author was surprised that so many examples were provided by a single informant in a village where the people rarely fish. This informant in Iriomote gave six examples of fishing with explosives in different situations: 1) river fishing by individual farmers using ready-made explosives; 2) fishing with ready-made explosives by a military unit in Ishigaki to supplement its rations; 3) fishing with extracted explosive by soldiers with knowledge of weapons; 4) fishing for mullet with such weapons as hand grenades on the occasion of disposing of ammunition; 5) fishing at sea on occasion of a local festival; 6) fishing with ready-made explosive by those who obtained it from outside the island. All these examples show that there were various non-professional fishers who used explosives. They included farmers, mine workers, military officers, and general islanders who had lost their means of production during the war.

They had also various motivations, ranging from a need to compensate for an everyday food shortage to an unusual means of acquiring offerings for a shrine. Noteworthy is that none of these was ever intended to provide easy money. Ishihara's indication (1982) that it was people without means of production who were obliged to fish with explosives might be accurate, although it should be verified by much more evidence. The examples also show that the actors who facilitated acquisition of explosives were those concerned with coal and gold mines (1 and 6) and with the army (2 and 3). In exceptional cases (4) and (5), hand grenades were easily acquired under a special situation where the US Army was disposing of Japanese ammunition. The explosives include those ready-made for mining use, military weapons, and explosive extracted from artillery shells and marine mines.

#### 6 Diversity of the Method: Evidences from Research in Kohama

On Kohama Island, which forms part of the Yaeyama Archipelago as well as Iriomote, semi-professional fishers used explosives. The informant, who was born into a fisher's family in 1956, experienced blast fishing for the first time about 1965 or "around the age of the third year at elementary

school". His father was targeting mullets, which disperse as soon as the explosive hits the water. Therefore a long fuse was attached to the explosive in order to ensure that the explosion would occur after the dispersed mullets have regained their composure and gathered again near the landing point. They retrieved the stunned fish by hand, and did not use nets. This anecdote demonstrates that professional fishers controlled explosion based on the behaviour and habits of a target species.

The informant became involved regularly in blast fishing around 1971, or "at the age of 15, after graduation from secondary school", when he began to work on the sea. During this period, most of the informant's neighbouring fishers made contracts with owners of *katsuo* (bonito or skipjack tuna, *Katsuwonus pelamis*) fishing boats to provide them with *jako* (live bait consisting of species that form large schools, such as *Caesio* sp. and *Chromis* sp.). For live bait fishing, fishers were divided into four groups, each composed of six or seven members. Each group was allocated priority rights by lottery to fishing grounds or rocks inhabited by *jako*. Skippers and crews of each boat memorized 40-50 sites. They sold their harvest only to the party with whom they had contracted. The contractor with the informant's group came from Hateruma, the southernmost island in the Yaeyama Archipelago.

The informant's father purchased the explosive from a dealer living in Ishigaki. It seems to have been a ready-made explosive for a construction use because, the informant said, it caused a strong explosion when used together with the fuse and blasting cap attached in the pack. It was rectangular in shape with a square cross-section and sides 6-7 cm long and height of 18-20 cm. The oil paper which wrapped the explosive individually had an English text printed on it. It seems to have been produced outside Japan, and supposed to have originated from a US military base in Okinawa. The texture of the explosive was like that of consolidated sand, i.e. easy to break into pieces but not sticky.

The informant never used this explosive together with the fuse and blasting cap, as the maker had expected. Instead it was crushed in a bowl, wrapped with a paper from a cigarette package, and then bound with a cotton string together with a fuse and blasting cap. The case of the blasting cap was made of metal and as thick as drinking straw. When an explosive is divided in this way, the explosion does not kill fish, but slows their motion. The fishers retrieved them alive with fishing nets, because a dead fish cannot be used as a live bait. The informant prepared this "homemade explosive" on the night before a fishing trip.

The target of this kind of fishing method was limited to *gurukun* (fusilier or *Caesio* sp. and other Caesionidae) that form fairly large schools. *Suzumedai* (damselfish or *Chromis* sp.) was also used as live bait, but since it forms smaller schools it did not yield a good harvest. Even if fished with an explosive, fishers had to make repeated explosions to reach the ordered quantity. On the other hand, a transparent fish called *shiroumi* 

(unidentified) that was also used as live bait rarely emerges from coral reefs. To harvest it, fishers used an oil feeder filled with solution of potassium cyanide. In contrast, fusilier was good to target because fishers could increase their productivity by using explosive to reduce the number of individuals that escaped.

Having confirmed that fusiliers were schooling around a particular 'rock', fishers unfolded the net, directed by the sekinin or fishing chief. This was a lift net with bottom weights and connected to long lines. Meanwhile the kata-sekinin, or vice-chief, dived into the water and observed the school's movement, to determine when and where to throw in the explosive. A crew on the boat threw it into the water as soon as kata-sekinin gave a signal. It was important that the kata-sekinin indicated the top of the school, but not the middle, to keep it going without dispersing. Since kata-sekinin in the water felt the blast directly, he mitigated it by hitting, kicking and stirring the water to deflect the blast wave. After the explosion, he lifted the base of the net with the lines and enclosed the school, whose movement had been slowed by the blast. The use of explosive minimized the loss of fish from the net. The harvest was kept in a bamboo basket  $(b\bar{a}ki)$  2.5 meters in diameter set in a prearranged location where the bonito fishers' boat picked up the harvest and the basket.

After a short period of this kind of fishing, the informant moved to Osaka where he spent May 5, 1972, the day of the reversion to Japan of Yaeyama, his homeland, as well as Okinawa and Miyako. His stay in Osaka lasted about 18 months. His experience of blast fishing for bonito bait occurred just before 1972, and can be estimated to have lasted less than a year.<sup>7</sup>

The comparison of the two examples which the informant gave, mullet fishing and fusilier fishing, shows that fishers employed different methods for different targets. When they were seeking to harvest live fish, they reduced the quantity of explosive and aimed at the top of the fish school. A fishing net for retrieving the fish was also indispensable in this case. Professional fishers used their meticulous folk knowledge, including that of mullet and fusilier behavior, as well as of explosive materials.

<sup>7</sup> The most important reasons why this kind of fishing ended can, as Kakuma (2008) points out, be attributed to the Japanese Coast Guard's organisational exposure immediately after the reversion of the Ryukyus to Japan. At the same time, however, we should not underestimate that the social order was recovering in this period after the confusion caused by defeat in the war and accompanying return rush of colonists from the former Japanese territories.

#### 7 Conclusion

Surviving newspaper articles tend to stress the illegality of blast fishing, and testimonies published after more than 30 years do not go much further than illustrating the chaotic situation during the post-war era. Both types of material cover the deeper context of the fishing with explosives, which includes the boom of primary-industrial products, for example. Keeping this point in mind, the author's research revealed many significant facts for the future study of blast fishing.

The interview in Iriomote revealed that not only professional fishers used explosives, but so too did farmers, soldiers, and former soldiers. These non-professional fishers, who lacked both fishing gear and skills, faced the difficult situation of rapid increase in neighbouring population and in food demand. The testimony tells us that blast fishing was conducted in an age of remarkable social change, from 1930 through 1960, by the socially vulnerable for their own survival.

On the other hand, the interview in Kohama demonstrated that professional fishermen combined explosives into their technological system and regulated the way of using them according to fish behaviour. They also had to make a living when opportunities for earning an income were limited, and they never intended to make easy money. As is evident from the different methods employed in mullet and fusilier fishing, the use of explosives is not necessarily destructive. Especially in fusilier fishing, an explosion greater than that required to 'astonish' fish caused the death of the target and therefore the loss of a harvest. As a result, unintentional destruction of fishing grounds was avoided. In practice, a *kata-sekinin* escaped injury, when another crew member threw the explosive near him, by moving immediately to the sea bottom. This anecdotes demonstrates that a blast did not penetrate the water to the point of sea bottom where corals live.

The preceding facts and suppositions mentioned go beyond the stereotypical and negative image of blast fishing. However, people with experience of fishing with explosives generally hesitate to tell their story, probably because of a sense of shame. One cannot say unequivocally that fishing with explosive had no negative aspects, but the whole picture of this type of fishing should be clarified quickly now that its witnesses have reached an advanced age.

The memories of blast fishing relate to political and economic issues relevant to the present time, including war, famine, return of expatriates, poaching, smuggling, coal mining, and the US military bases. All of them tend to make the witnesses silent for the very reason that the issues are significant. Excavation of 'negative heritage' that individuals hesitate to publish is strongly recognized as necessary (Nora 1989) to transmit to the next generation, especially now that the memories of wars and disasters are being challenged. This topic should be pursued, with careful attention to privacy and post-traumatic stress disorder, in relation to the general representation of history.

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#### **Bibliography**

- Akamine, Jun (2006). "Who Is to Be Blamed? Socio-cultural Notes on Blast Fishing in the Spratly Islands". Japanese Coral Reef Society (ed.) Proceedings of 10th International Coral Reef Symposium, 1427-33.
- Asahi Weekly Magazine (ed.) (1988). *Nedanshi nenpyō: Meiji, Taishō, Shōwa* 『値段史年表——明治·大正·昭和』 (A Chronology of Commodity Prices: Meiji, Taishō, Shōwa). Tōkyō: The Asahi Shimbun Company.
- Cinner, Joshua E. (2010). "Poverty and the Use of Destructive Fishing Gear near East African Marine Protected Areas". *Environmental Conservation*, 36(4), 321-6.
- Cornish, Andrew S.; David McKellar (1998). "A History of Fishing with Explosives and Poisons in Hong Kong Waters". *Naga, the ICLARM Quarterly*, 21(3), 4-9.
- Fox, Helen E.; Pet, Jos S.; Dahuri, Rokhmin; Caldwell, Roy L. (2003). "Recovery in Rubble Fields: Long-Term Impacts of Blast Fishing". *Marine Pollution Bulletin*, 46, 1024-31.
- Ichikawa, Hideo (2009). *Itoman gyogyō no tenkai kōzō: Okinawa Amami wo chūshin toshite*『糸満漁業の展開構造――沖縄・奄美を中心として』 沖縄タイムス社 (Development of Itoman Fisheries. A Perspective from Okinawa and Amami). *Okinawa Times*.
- Imamura, Haruka (2003). Shima wo tabi suru 『島を旅する』 (Travelling over the Islands). Kagoshima: Nampou Shinsha.
- Ishihara, Masaie (1982). *Daimitsu bōeki no jidai: senryō shoki Okinawa no minshū seikatsu* 『大密貿易の時代——占領初期沖縄の民衆生活』 晩聲社 (The Age of the Great Smuggling: Okinawan People's Lives in the Early Period of US Occupation). Tōkyō: Banseisha.
- Jiddawi, Narriman S.; Öhman, Marcus C. (2002). "Marine Fisheries in Tanzania". *Ambio*, 31(7-8), 518-27.
- Kakuma, Shin'ichiro (2008). Gyogyō to sangoshō seitaikei no kyōzon wa kanō ka? Jizoku-teki shigen riyō ryūtsū ni yoru Ajia taiheiyō no sato umi o mezashite 漁業とサンゴ礁生態系の共存は可能か?——持続的資源利用・流通によるアジア太平洋の里海をめざして (Does Fisheries Compatible with Coral

- Reef Ecosystems? Toward Establishment of satoumi through Sustainable Resource Use and Distribution in the Asia-Pacific Area). Nobuhiro Kishigami (ed.), *Kaiyō Shigen no ryūtsū to kanri no jinruigaku* 『海洋資源の流通と管理の人類学』 (Anthropology of Distribution and Management of Marine Resources), Tōkyō: Akashi Shoten, 173-94.
- Kobayashi, Teruyuki (2003). "Uminchu" 『海人』 (Fishers). Mainichi Newspapers Press.
- Nakamura, Zen'ei (2003). *Okinawa uminchu: hitori oikomi ryō ni ikiru* 『 沖縄ウミンチュ―― 一人追い込み漁に生きる』 河出書房新社 (Okinawan Fisher: A Lonely Livelihood by Drive-in-Net). Tōkyō: Kawade Shobo Shinsha.
- Noguchi, Takenori (1987). *Hyōkaimin no jinruigaku* 『漂海民の人類学』 (Anthropology of Sea Nomads). Tōkyō: Kōbundō.
- Nora, Pierre (1989). "Between Memory and History. Les Lieux de Mémoire". Representations, 26, 7-24.
- Pet-Soede, Lida; Cesar, Herman S.J.; Pet, J.S. (1999). "An Economic Analysis of Blast Fishing on Indonesian Coral Reefs". *Environmental Conservation*, 26(2), 83-93.
- Pet-Soede, Lida; Erdmann, Mark V. (1998). "Blast Fishing in Southwest Sulawesi, Indonesia". *Naga, the ICLARM Quarterly,* 21(2), 4-9.
- Sakai, Atsushi (1990). *Okinawa no Uminchu* 『沖縄の海人』 晶文社 (Okinawan Fishers). Tōkyō: Shobunsha.
- Senkaku Shoto Bunken Shiryo Hensan Iinkai (2012). Senkaku kenkyū Senkakushotō kaiiki no gyogyō ni kansuru chōsa hōkoku: Okinawa-ken no gyogyō kankei-sha ni taisuru kikitorichōsa 2012-nen 『尖閣研究尖閣諸島海域の漁業に関する調査報告――沖縄県の漁業関係者に対する聞き取り調査 2012年』 (A Report of Fisheries in Senkaku Waters: Interviews with Okinawan Fishers in 2012). Naha: Association for Documentation of the Senkaku Islands Issue.
- Senkaku Shoto Bunken Shiryo Hensan Iinkai (2014). Senkaku kenkyū Senkakushotō kaiiki no gyogyō ni kansuru chōsa hōkoku: Okinawa-ken no gyogyō kankei-sha ni taisuru kikitorichōsa 2014-nen 『尖閣研究尖閣諸島 海域の漁業に関する調査報告——沖縄県の漁業関係者に対する聞き取り調査 2014 年』 (A Report of Fisheries in Senkaku Waters: Interviews with Okinawan Fishers in 2014). Naha: Association for Documentation of the Senkaku Islands Issue.
- Ueda, Fujio [1975] (1991). Okinawa no uminchu: itoman gyomin no rekishi to Seikatsu 『沖縄の海人―― 糸満漁民の歴史と生活』 (Okinawan Fishers: Historical and Quotidian Issues of the Itoman People). Naha: Okinawa Times.

#### **Small-scale Fisheries in Japan**

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

## The Development of Women Fishery Entrepreneurship Group in the Japanese Marine Products Distribution Sector

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**Abstract** The paper focuses on the development of women fisheries entrepreneurship groups in the marine products distribution sector in Japan. In particular, we will discuss the women's groups in fishery cooperative associations (FCAs) who live in fishing communities and conduct economic activities using local resources centred on fishery products. The case study of the Sanmi Sea Mothers will also be examined following its historical evolution up to its current operational and economic performance.

**Summary** 1 The Characteristics of Marine Products Distribution in Japan and the Increasing Handling of Low Value Fish. – 2 The Movement by Women in Fishing Communities. – 2.1 Women's Groups in Fishery Cooperative Associations (FCAs) and Women Fisheries Entrepreneurship Groups. – 2.2 Motivations and Major Activities of Women Fishery Entrepreneurship Groups. – 2.3 Economic Impact. – 3 A Case Study: The Sanmi Sea Mothers. – 3.1 Community Overview. – 3.2 Development of Sanmi Sea Mothers. – 3.3 Current Situation. – 3.4 Specific Features of Sanmi Sea Mothers. – 4 Potential and Challenges for Women Fishery Entrepreneurship Group in the Future.

**Keywords** Women fishery entrepreneurship group. Low value fish. Processing and selling. Utilising local fish. 'Unsellable' fish. Fishing community. Small activity.

### 1 The Characteristics of Marine Products Distribution in Japan and the Increasing Handling of Low Value Fish

There are many small-scale fisheries and communities landing a broad diversity of fish everywhere in Japan. Usually, the local Fisheries Cooperative Associations (FCAs) are managing and recording the fish landings in these ports. The local fish stores, fish processors, intermediary fish agents, etc., come to buy fish at these local fishing ports. Therefore, they are





Figure 1. Fish peddler recommending fish in Wajima (© 2003 Kumi Soejima)
Figure 2. Fish peddler making *sashimi* 刺身(sliced raw fish) in Wajima
(© 2003 Kumi Soejima)

called "wholesale markets at producing area". The size of these markets is usually not very big. Aside from such local consumption, a lot of fish are gathered and transferred to big cities and sold at big wholesale markets. They are called "wholesale markets at consuming areas", and the Tsukiji Fish Market in Tokyo is one of these wholesale markets. Currently, there are about 35 wholesale markets in consuming areas and about 900 wholesale markets in producing areas all over Japan, which form distribution chains that cover the whole of Japan. These wholesale markets' distribution networks contribute to a stable and abundant food supply no matter where we live in Japan, and they support Japanese food culture's reliance on raw fish (Sano 2015, 97-100).

In addition, the existence of local and small fish shops and fish peddling, in which women are often engaged, is important, because these can evaluate the wide variety of fish landed and distribute this fish, enabling our culture to cook and eat this fish. They go to wholesale markets in producing areas operated by FCAs and buy varieties of local fish, which they sell to local consumers in addition to teaching consumers how to cook and eat the fish they have bought.

For example, women have peddled fish in the town of Wajima, Ishikawa Prefecture (map 1), for a long time. Until recently, they peddled local fish using two-wheeled carts; however, the use of light trucks is gradually increasing. Their commodities are fish caught by their husbands (who work as fishers), or they buy at wholesale markets in producing areas or from local intermediaries. Because the main fishing methods in Wajima are trawl fisheries and purse seine fisheries, much low value fish are landed and sold at local wholesale markets. Therefore, the women carefully take time to pre-process (e.g., dressing into fillet, making a dried overnight etc.) and sell this fish to customers who each buy only a small quantity.

Peddlers sell through constant communication with their customers. This communication includes not only daily conversation but also an explanation about the fish: for example, the species of fish, how to cook it, fishing methods, the name of the fisher, and so on. They actively communicate all this information. When they sell fish, they not only cut off fish heads and guts and slice in rounds or fillets, but they may also prepare bite-sized thin slices of raw fish for sashimi or shuck dozens and dozens of turban shells, shell by shell, depending on the customer's order. In addition, they may dip the fish in soy sauce or marinate in vinegar on the spot. They may suggest a dish for the day after asking customers about their previous night's meal. In recent times, fish peddling is conducted at the time and place of the customer's convenience, because they can keep in contact with customers using mobile phones. Despite the increasing number of GMSs (General Merchandise Stores) and SMs (Super Markets), fish peddlers have also been increasing their customer numbers recently, as they can offer more tailored services to customers. They supply fresh,

safe fish, offering peace of mind and supporting Japanese food culture by communicating cooking methods. Incidentally, they also serve to confirm the safety of aged people living alone on their usual peddling route, amid the growing number of aged people living alone.

However, these small local peddlers who play an important role in the lives of local communities by promoting Japanese culinary culture and utilisation of diverse kinds of fish continue to decline. On the other hand, the numbers of GMSs and SMs are increasing. GMSs and SMs have numerous chain stores across all over the country, giving them strong buying power in regard to marine products distribution. GMSs and SMs order marine products selected under four conditions for given distribution and production areas: constantly fixed quantities (large quantities), constantly fixed quality, constantly fixed times, and constantly fixed prices (low prices). GMSs and SMs are particularly insistent in their demands that production areas cut fish prices. Therefore, the size and species of fish are standardised and the only fish in strong demand are those fit for mass distribution and widespread distribution. Even if the fish are delicious, unknown and local or minor fish varieties have lesser value. Even if the fish are of a well-known variety, if their size is too big or too small they are unsellable for GMSs and SMs. If the lot size is too small they are also unsellable. Of course, we can understand that GMSs and SMs, which have numerous chain stores all over Japan, need large quantities of fish. But why are the size and species of fish standardised? The authors had actually heard a buyer say: «On ordering lists that come up on my PC screen, I order only the kinds of fish I know because I'm not sure whether I can sell a fish if I don't know it». Thus the line-up of fish at GMSs and SMs becomes increasingly standardised. Many local or minor fish varieties evaluated and distributed by wholesale markets in producing areas, fish shops and fish peddlers are considered of lower and lower value, as they are unfamiliar. As a result, the handling of low value fish in Japan is currently increasing. Around 500 or 600 fish species landed all over Japan are actually fit to eat. But GMSs and SMs will stock only 50 to 70 of those fish species (Hamada 2011, 105).

Given this situation, the sale of these 'unsellable' fish is increasing at producing areas. Especially small lots of fish and various types of local fish not in demand by GMSs and SMs are continuing to lose commercial value. On the other hand, the concept of 'balanced harvesting' (Garcia et al. 2012) suggests that the consumption of a variety of small fish species is important to conserve the function and structure of marine ecosystems. So that means most fish caught, especially by particular small-scale fisheries, continue to represent lost opportunities for commercialisation. Many kinds of fish are underutilised or discarded. From the viewpoint of ecosystem-based fisheries management, this is irrational.

# 2 The Movement by Women in Fishing Communities

# 2.1 Women's Groups in Fishery Cooperative Associations (FCAs) and Women Fishery Entrepreneurship Groups

Given this situation, many women at fisheries in various regions have created women fishery entrepreneurship groups in order to sell local fish with added value. We refer to groups organised by women living in fishing communities that conduct economic activities using local resources centred on fishery products or whose purpose is focused on links to future economic activities as women fishery entrepreneurship groups.

Organisations known as FCA's Women's Groups have come to exist in many fishing communities. There are 680 women's groups within FCAs, consisting of 40,102 members at the present (National Association of FCA's Women's Groups 2015). The smallest-scale coordinating organizations are local FCAs. To achieve holistic fisheries coordination for local fishing grounds, local FCAs have to establish operational regulations that stipulate equipment restrictions, as well as closures of fishing grounds on a seasonal or area basis, etc (Makino 2011). Most FCAs have a women's groups of FCAs carry out certain activities. One such activity is promoting the eating of fish. Women's groups of FCAs teach how to cut up fish and how to cook fish, mainly at local primary schools. A second activity is cleaning beaches. A third is promoting the use of natural soaps. They encourage local people to use natural soaps instead of detergent soaps to help protect the environment. A fourth activity is tree-planting on mountains, based on the idea that mountains are important for protecting marine environments and fish. A fifth activity is engaging in welfare support, which a number of women's groups of FCAs are increasingly carrying out particularly for elderly people given Japan's ageing population. For example, they held an exercise class and they make a lunch for local seniors and so on. In these ways, women's groups of FCAs are constantly tackling the issues of life in fishing communities. However, numbers of both groups and their members are decreasing nowadays. In addition, the members of women's groups of FCAs are ageing, overall, and fewer people between the younger generation and the ageing generation feel an obligation to engage in women's groups of FCAs' activities (Soejima, Yano 2004). Therefore, the activities of women's groups of FCAs are moving toward gradual decline.

On the other hand, women fishery entrepreneurship groups in fishing communities have been developing and flourishing recently. Our research confirmed the existence of at least 364 groups across Japan in 2010 (Tokyo Fisheries Promotion Foundation; Umi Hito Kurashi Forum; Fishery Communities Planning Co, Ltd 2011).

# 2.2 Motivations and Major Activities of Women Fishery Entrepreneurship Groups

There are four main motivations behind start-up of women fishery entrepreneurship groups. Firstly, they want to make efficient use of local fish, which is handled as low value fish. As mentioned above, the rate of local fish (which was distributed as a saleable commodity in the past but is distributed as low value fish in the present day) is increasing at the moment due to distribution issues caused by the powerful position of GMSs and SMs. Whenever they calculate that shipment to wholesale markets makes no business sense, fishers either eat those fish at home, share fish around the neighbourhood, or dump fish at sea.

Women married to fishers see the fish their husband made great efforts to catch treated so unfairly at the market, and they wonder why they are forced to throw away such delicious fish, considering it wasteful and so on. Such reasoning has caused many women to create their groups.

There is a women fishery entrepreneurship group called Hikoshima Sea Ladies located in the city of Shimonoseki, Yamaguchi Prefecture (map 1). The main fishery in their area is a small trawl fishery. One characteristic of small trawl fisheries is that their catches are mostly low value fish. Therefore, the wives of this fishers have been selling the fish that husbands catch directly to consumers since early times, because their fish are considered unsellable by auction at wholesale markets. Several wives of fishers in the Hikoshima community created the women fishery entrepreneurship group named Hikoshima Sea Ladies in 2001 because they often could not sell their fish. Their business consists of serving lunches utilising local fish buying 'unsellable' fish from the wives of fishers in Hikoshima and cooking these fish by pan-frying or deep-frying. Figure 3 shows their shop and figure 4 their lunch menus. A lot of tourists visit the shop, and eat and enjoy the 'unsellable' fish.

There is another women fishery entrepreneurship group, Saga-shi Gyoson Josei no Kai, which roughly translates as 'Fisherwomen's Group of Saga City'. This group was established by women involved in laver seaweed aquaculture. Prices of even slightly blemished dried laver seaweed have been falling significantly, even though these have been painstakingly created. This group became active from 2000 because they had the conviction that their dried laver seaweed tasted good even when it had minor blemishes. They have made efforts to commercialise their products, aiming for eventual rollout in Tokyo department stores.

Current their flagship product is laver simmered in soy sauce (laver seaweed simmered into a paste with soy sauce and other ingredients, as illustrated in figure 5). This laver simmered in soy sauce is often eaten on rice in Japan. Many Japanese do not know other ways to eat laver simmered in soy sauce. Therefore, they suggest alternatives to enjoy laver



Figure 3. Hikoshima Sea Ladies shop (© 2015 Kumi Soejima) Figure 4. Hikoshima Sea Ladies lunch menus (© 2015 Kumi Soejima)



Figure 5. Laver seaweed simmered in soy sauce by Saga-shi Gyoson Josei no Kai (© 2015 Kumi Soejima)







Figure 6. Lunch by Saga-shi Gyoson Josei no Kai (© 2013 Kumi Soejima)

Figure 7. Banded blue-sprat with vinegared okara おから by Tosa Himeichi group.
Soybean grounds squeezed from soymilk are known as okara (© 2016 Kumi Soejima)
Figure 8. Gomadashi (© 2009 Kumi Soejima)

simmered in soy sauce. For example, figure 6 shows a pasta made using laver simmered in soy sauce and some accompanying dishes using laver simmered in soy sauce.

Secondly, they want to make places to work in their own community, as there are few in fishing communities. Furthermore, in the case of fishery households, for women who engage in pre-harvest and post-harvest work, their entire lives revolve around this work. They can only rarely find places to work in between pre-harvest and post-harvest work. Therefore, in many cases women fishery entrepreneurship groups are established to create places to work that complement fishing-related work and domestic care work in their communities.

The Tosa Himeichi group is active in the town of Sukumo, Kochi Prefecture (map 1). They started their group in 2004 to create places for local fisherwomen to work. In addition, the prices of the fish their husbands catch using the purse seine method get lower every year. Most of this fish is used for fish aquaculture feed and is traded at considerably lower prices, even though it is tasty and fresh. Thus, to add as much value as possible to the fish, the wives started processing and preparing it as food and selling

it from trucks in the city. In figure 7 there is one of their products. They process local traditional cooking. However, peddling fish from trucks has become more difficult for these women, as they are now ageing. Therefore, they stopped peddling from trucks and now they sell their products at local roadside stations.

Roadside stations are licensed and registered with the Ministry of Land, Infrastructure, Transport and Tourism Road Bureau. The roadside stations system was launched in 1993. Its basic concept is to create a safe, comfortable road traffic environment, and unique, lively spaces that showcase the individuality of a region. Roadside stations have three distinct features:

- Refresh: Rest facilities, including free 24-hour parking and restrooms.
- 2. Community: Regional cooperation where cultural centres, tourist attractions, recreation facilities and other local development facilities promote interaction with the region.
- 3. Information: Where road, tourist and emergency care information is readily available.

There are currently 1093 roadside stations in Japan (as at May 2016). Because there are so many roadside stations established throughout Japan, many women's entrepreneurship groups have secured places where they can sell their products.

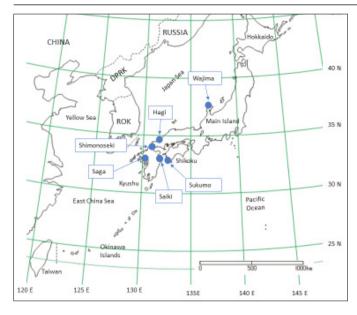
The third aim of these group is to spread and pass on their local traditional food cultures. The women's fishery group Mebaru in the town of Saiki in Oita Prefecture (map 1) produces and sells the local traditional food gomadashi (fig. 8). Gomadashi is a paste made with grilled fish flakes, sesame, soy sauce and sweet rice wine used for cooking. It can be used to make soup with 1 tablespoon of *gomadashi* to 1 cup of hot water. The fish these women use to make gomadashi is Trachurus japonicus, which are cheap since they are caught in great number in local purse seines, or Coryphaena hippurus, which have low market value in Japan. Coryphaena hippurus has low market value because the Japanese seem to have an innate dislike of Coryphaena hippurus. However, the price of Coryphaena hippurus at wholesale markets in local producing areas is apparently slowly rising after Mebaru started to use local Coryphaena hippurus. In addition, the desire to spread the word about gomadashi led them to publish and sell an original *gomadashi* recipe book in 2014 (fig. 9). This recipe book contains not only existing serving ideas but also many new ideas. We have heard that this book is very popular and will be reprinted.

<sup>1</sup> All Nippon Michi-no-Eki Network website http://www.michi-no-eki.jp/en-what/?language=1 (2016-10-12). English version available on the website.



Figure 9. Mebaru recipe book (© 2014 Mebaru)

The fourth goal of these women is educating consumers about local fish. People who are not involved with fisheries often do not know about local fisheries, even if they live in a fishing community, According to our research in 2006, people not involved in fisheries do not know about local fisheries and have very few opportunities to eat local fish (Soejima 2003). The district of Saga Prefecture (home of the aforementioned Saga-shi Gyoson Josei no Kai) is famous for producing dried layer seaweed. According to our interview-based study, however, rather unexpectedly people in the area tend not to eat dried laver seaweed and do not know how to farm laver seaweed. Naturally, they do not know about the difficulties and opinions of layer seaweed producers. Some people did not even know that the district is a well-known production area for laver seaweed. Therefore, Saga-shi Gyoson Josei no Kai is making efforts to convey how layer is produced and the thoughts and opinions of laver producers by offering hands-on activity sessions in their factories. Many women fishery groups try to educate people about the kinds of local fishes they have, how to cook and eat the fish, how it tastes and so on. We can say that fisheries women fishery entrepreneurship groups play an important role in joining production with consumption.



Map 1. Locations mentioned in the text (© 2018 Mitsutaku Makino)

### 2.3 Economic Impact

In this way, women fishery entrepreneurship groups are developing widespread across Japan. In a fisheries white paper, the Ministry of Agriculture, Forestry and Fisheries of Japan expressed its expectations that fishery women play a role in regional development. Supports from national and local governments for fishery women entrepreneurship groups are increasing. Our research confirmed the existence of at least 364 groups across the nation in 2010. They process and sell local fish because they want to promote effective utilisation of this fish. But its annual sales are generally small. Many groups' annual sales are about 3 million yen (US\$ 28,000). As economic business goes, this is rather small. Some have suggested that such small-scale activities are just a hobby for these women. However, these women are using local fish, underutilised fish and discarded fish as their materials. If we multiply the average turnover of US\$ 28,000 by the 364 groups, we can see that they produce a value of roughly 1 billion yen (US\$ 9,385,000). How should we evaluate this situation and the activities of fishery women? We evaluate their activities as having crucially important significance.

Next, we will show a case study of practical entrepreneurship by fishery women. We watch the Sanmi Sea Mothers, because they are one high-grossing women fishery group and they try to pay attention to local human services so much.

## 3 A Case Study: the Sanmi Sea Mothers

### 3.1 Community Overview

The Sanmi Sea Mothers are active in the Sanmi community in the town of Hagi, Yamaguchi Prefecture (map 1), the western part of Japan. The Sanmi community is located around 10 km from central Hagi. The Sanmi community has 583 households with a total population of 1,224 people (in 2016). While Japan's overall proportion of population aged 65 or over (aging population rate was 26.7% in 2015) (White Paper on Aging Society 2016), the aging population rate in the Sanmi community is over 46% (Shioya Kimiko 2013). The main types of fishing in the Sanmi community are set net, offshore gill net, small trawl net and so on. Fish caught by these fishing methods tend to be of diverse species and caught in small lots. In the past, these small lots and diverse types of fish used to be properly evaluated at the wholesale market in this producing area established by the Sanmi FCA and then wholesaled and distributed by local peddlers. However, the wholesale market of the Sanmi FCA was abolished in 2002, so now fishers in Sanmi have to ship their catch to a large, new wholesale market in central Hagi.

The abolition of such tiny wholesale market in a producing area and this consolidation of multiple wholesale markets in a producing area were done according to Japan's national policy. Here we will explain the national policy of abolition and consolidation of wholesale markets in producing areas. As mentioned previously, there are many wholesale markets in producing areas across Japan. Nearly all wholesale markets in producing areas are opened and run by FCAs, which carry out wholesale trading.

Private wholesalers and traders dominated marine products distribution until around 1932. Because many fishers borrowed a lot of money from them, they were forced to sell their fish at 30% or 40% lower than the market price to these private wholesalers and traders. Fishers were under the control of private wholesalers and traders. Fish prices kept dropping lower and lower, and fishers lapsed into dire economic conditions following the economic crashes of 1927 and 1930-31. Therefore, the national government strongly supported clearing away this mercantile capital and allowing FCAs to handle fish caught by local fishers. As a result, many wholesale markets in producing areas were opened by FCAs, and many cooperatives sell fish at auction. Much of the income of FCAs comes from sales of fish at their wholesale markets (Hirasawa 1979).

However, many wholesale markets run by FCAs are small in scale and

<sup>2</sup> Data from Hagi municipal government website; URL http://www.city.hagi.lg.jp/so-shiki/12/706.html (2016-10-16).

their financial conditions have deteriorated in the present day. For this reason, the financial conditions of FCAs are difficult too. Thus, in 1999, Japan's national government announced a new policy of merging multiple FCAs' wholesale markets into fewer single large-scale wholesale markets. The national government pressed forward with this amalgamation of FCAs, making a major push for reform. As a result, the reorganisation and improvement of fishery cooperatives progressed rapidly and a lot of FCAs have been amalgamated since around 2000.

Originally, there were several FCAs owned by 14 fishery communities in the town of Hagi, Yamaguchi Prefecture. These cooperatives amalgamated into a single Hagi FCA in 2001 and then into one large FCA for the entirety of Yamaguchi Prefecture in 2005.

At the moment, the Sanmi branch FCA is a subsidiary organisation of the Hagi controlling branch, which in turn is a subsidiary organisation of the Yamaguchi Prefecture FCA. There were previously 8 wholesale markets in producing areas run by fishery cooperatives (including the wholesale market run by the Sanmi FCA) in the town of Hagi before these were consolidated into a single market in 2002. The Hagi controlling branch of the Yamaguchi Prefecture FCA now manages this wholesale market in a producing area. But the market value of the different types of fish landed at Sanmi has dropped at this new large-scale wholesale market (Shioya 2013, 2). Therefore, Sanmi Sea Mothers started to process and sell these local fish to solve this issue.

### 3.2 Development of Sanmi Sea Mothers

The members of the women's group of the Sanmi branch of the FCA number around 105 as at 2014. The history of this group can be divided into three periods.<sup>3</sup>

# 3.2.1 First Period: Growing Awareness of Residents' Issues (1996-2005)

In this first period, women became more aware of residents' issues and commenced activities to address those issues. Because the proportion of elderly persons was increasing in the Sanmi community, in 1996 the women's group of the Sanmi branch of Yamaguchi FCA started a monthly lunch party for elderly people living in Sanmi community, and they have continued this activity to the present day. Through this monthly lunch party, members of the women's group discovered that elderly people in the Sanmi community

3 This chapter is based on Soejima 2014.

experienced difficulties cooking and grocery shopping every day. As stated previously, the fish landed at Sanmi were considered unsellable at the new wholesale market. The women's group believed that if they processed and sold this fish, this would help the fishers' income. And if they prepared and sold lunch boxes using this fish and delivered these to elderly people's houses, they could contribute to community welfare. They immediately moved into action.

### 3.2.2 Second Period: Commencing Business Activities (2006-2007)

Firstly, all 194 members of the women's group of the Sanmi branch FCA went on an inspection tour of more advanced areas and held a study session about food hygiene at the public health centre. However, the leader of the women's group (and current president of Sanmi Sea Mothers) found that no more than 40 members joined the study session, despite many members joined the inspection tour. In other words, a lot of members participated in fun activities like an inspection tour, but only a few members participated in less enjoyable activities such as a study session. There were major differences in awareness about these activities among the members of the women's group. In addition, there was also the issue that the responsibility for activities varied greatly depending on the leader at that time because the leadership of the women's group changed every two years. The leader thought it better to form an entirely new group comprising only members who agreed with the goals of its activities and who were eager to learn. The leader of the women's group proposed an investment-style approach where one unit of investment would be equivalent to 10 thousand yen (approximately US\$ 96.34 at October 2016 exchange rates), whereby 42 members contributed capital and organised a new group in 2007. This group included not only women but also the male chairman and the branch office manager of the Sanmi branch (positions held at that time) and a set net fishing boat captain as the capital investors. The involvement of these male executives of the fisheries cooperative was expected to increase the level of trust for these women's activities among the community and with other organisations. Among the 42 capital investors, 15 were hand-on partners who commenced processing and preparing meals using local fish and vegetables, delivering lunch boxes to local elderly people.

### 3.2.3 Third Period: Turnaround (2008-2010)

While Sanmi Sea Mothers were still active, the Sanmi roadside station was built in the area. When this roadside station opened a makeshift food outlet in 2008, the roadside station called on Sanmi Sea Mothers to sell their

prepared meals here. Sanmi Sea Mothers introduced an hourly pay system at that time, after which the amount of processing required also increased. Then they reached a major milestone. The roadside station suddenly proposed that Sanmi Sea Mothers should manage a restaurant in the three months before the roadside station officially opened. The leader of Sanmi Sea Mothers had substantial concerns over the management of a restaurant, but after numerous visits to the public health authority, the members were prepared to open their restaurant. They opened their restaurant in April 2010. The sales turnover of the restaurant exceeded 10 million ven (approximately US\$ 96,334 at October 2016 exchange rates) between April and May in 2010, at which time their tax accountant pointed out that there was a taxation issue in this situation. At the same time, he recommended converting Sanmi Sea Mothers to a joint stock corporation. They had no time to perform a comparative review of other corporate systems and thus they converted their group to a joint stock corporation in August 2010. Five members of Sanmi Sea Mothers each took a 1-unit stake at 50,000 yen (approximately US\$ 481.30 at October 2016 exchange rates), which formed a capital fund of 250,000 yen (approximately US\$ 2,406.50).

### 3.3 Current Situation

### 3.3.1 Composition of Membership

In 2014, Sanmi Sea Mothers had a restaurant section (18 members), a roadside station fish sales section (2 members) and a prepared food processing section (9 members). The restaurant section is mainly composed of the board members, who play a central role in the company, as well as members who like cooking and serving customers and other local women who are not members of the women's group of the FCA. The women who are members of the women's group of the Sanmi branch FCA, but who do not like serving customers, work in the prepared food processing section. This section rents and uses the kitchen of the Sanmi branch of Yamaguchi Prefecture FCA, which is located separately from the roadside station. The roadside station fish sales section has one male member, who was one of the capital investors and was previously head of the Sanmi branch. He is involved with Sanmi Sea Mothers as a salesperson in this section. The average age of the members is rather high, around 66 years old, but they have one young member aged 33. In addition, members include not only fishery household members but also farm household members and local general household members. In other words, many members who have no involvement with fishery are involved with Sanmi Sea Mothers. There are also some members who are elderly people living alone. Sanmi Sea Mothers give them a valuable opportunity to maintain an income. The

president considers each member's area of speciality and compatibility and decides the member's job assignment. She tries to ensure a pleasant working environment for each member.

### 3.3.2 The Operational Performances

At their restaurant, Sanmi Sea Mothers offer the Nihonkai teishoku 日本海定 食 (Japan Sea combination meal) (price 1000 yen, or approx. US\$ 9.63 at October 2016 exchange rates). Mainly featuring local fresh fish sashimi added a 'Fried Trachurus japonicus combination meal' (price 800 yen, or approx. US\$ 7.70), as well as other meals. They also prepare processed foods like pressed sushi, one of local traditional food, using local Trachurus japonicus and pickled Upeneus japonicus, which have long been commonly cooked and eaten at homes in the Sanmi community (fig. 11). Average prices are 250 yen (US\$ 2.41) per pack. They process and sell lunch boxes from 500 yen to 5,000 yen in response to customer orders. The production volume of lunch boxes is higher than other prepared food in the prepared food processing section. They deliver lunch boxes every day to business premises and so on in the town of Hagi. They deliver to the houses of elderly people on Wednesdays and Fridays. However, the new day-care facility in the neighbourhood has started to deliver the lunch boxes to the houses of elderly people, which has reduced the number of users of Sanmi Sea Mothers services. We can say that competition for lunch box deliveries in the elderly market has emerged in this community. Given this situation, Sanmi Sea Mothers are working to deliver a strong PR message that they are committed to local food and do not use artificial seasonings in their lunch boxes.

The total sales turnover for Sanmi Sea Mothers was about 36 million yen (US\$ 356,000) for the period August 2012 through July 2013. Sales at the restaurant comprise 58%, fresh fish and marine products comprise 27%, prepared foods and lunch boxes comprise 14%, and other sales comprise 1% of this total. About 30,000 people visit the restaurant each year, including a lot of tourists as well as local visitors. Raw material expenses (the cost of marine products makes up around half of this) occupy around 50% of total sales. Fish is mainly bought through local intermediaries at wholesale markets run by FCAs, while vegetables are mostly purchased at earlymorning markets run by Japan Agricultural Cooperatives. The remaining half of the costs are comprised of employment costs, rental payments for the kitchen of the Sanmi branch, and fees for the roadside station and the Yamaguchi fishery cooperative. Monthly salary for each member is between 25,000 yen (US\$ 241) and 50,000 yen (US\$ 481). Their margins are very small. However, the president prefers to allocate profits toward employment costs and purchasing local fish, not toward the company's margin. The group operates a five-members shift everyday in the restaurant section.





Figure 10. Sanmi Sea Mothers' members preparing the lunch at their restaurant (© 2014 Kumi Soejima)

Figure 11. Prepared foods of Sanmi Sea Mothers (© 2014 Kumi Soejima)

### 3.3.3 Current Issues and Prospects

Among the issues the group faces today, the first is overworking of the central members. The president and vice-president, in particular, have a lot of work they perform at home, and this work can be very physically demanding. But they have strong feelings of responsibility toward the company's vision - namely, utilising local fish, contributing to local fishing and local elderly people, creating a liveable community, and so on. This helps them sustain such levels of overwork. Secondly, there is a major discrepancy in sense of responsibility for work between these central members and other members. The president has considered how other members share the company's vision and feel a sense of responsibility for its work. But Sanmi Sea Mothers received an award from the Minister of Agriculture, Forestry, and Fisheries in the National Youth and Women Fisheries Exchange Contest in 2012 and the group was interviewed many times for TV, newspapers etc., both inside and outside the Prefecture. In other words, they are receiving increasing recognition from outside their own community. This recognition serves as an opportunity for other members to realise that their group's operations are significant. The company president feels that other members' sense of responsibility and awareness of their job are growing. That is to say, Sanmi Sea Mothers play a role in giving opportunities to women who not directly involved with local fishing to share in the community's issues.

### 3.4 Specific Features of Sanmi Sea Mothers

Sanmi Sea Mothers have 3 significant features. Firstly, they utilise local fish resources and local labour resources. They play a prominent role in the fishing community's economy by connecting local production, local processing, local distribution and local consumption. The weakening of fishing communities due to ageing and depopulation etc. is well underway. In order to restructure fishing communities, there is a major need to restructure the local economic circulation that supports society in these communities (Okada 2004). Sanmi Sea Mothers are trying to respond to these issues. Secondly, in many cases, only fishery women participate in women fishery entrepreneurship groups, but Sanmi Sea Mothers play an important role in generating local employment through their entrepreneurship by employing women not involved in the fishing industry. Furthermore, in addressing the issues of life in fishing communities, people tend to think only of the fishing community itself. But Sanmi Sea Mothers give opportunities to share the issues of life in fishing communities with other locals in the community. The authors consider it very important that people who live their daily lives in fishing communities, even if completely uninvolved in the fishing industry, can be made aware of issues that involve them and

can participate in group activities to develop the community. Thirdly, they involve local men both as capital investors and as practical partners. Many women fishery activities remain within the framework of division of labour by gender in which men do not participate. But when men participate in the women fishery entrepreneurship group as hands-on practitioners, as in this case study, it opens the possibility of shifting from 'women fishery entrepreneurship' to true 'community entrepreneurship' in which women and men living in the local community tackle issues together. Fourthly, in many cases, the central people involved in fisheries women entrepreneurship are aged 60 years old or more. The issues with passing on this work have been pointed out. To this point, Sanmi Sea Mothers reply: "Young people have no way to find work in our community. So they have to leave the community to find work. But many of them will come back to Sanmi after retirement and so we want to prepare somewhere they can find work at that time. This is our purpose". People usually tend to believe that fisheries women entrepreneurship organisations must include younger people, so this way of thinking offers a fresh perspective.

# 4 Potential and Challenges for Women Fishery Entrepreneurship in the Future

A great deal of women fishery entrepreneurship is minor when viewed in light of sales and earnings as well as income of its members. They tend not to extend beyond volunteer activities. Small groups like women fishery entrepreneurship groups are liable to become targets for abolition given the current situation of market fundamentalism, which places more value on economic growth and massive size and which has become the global standard.

However, women fishery entrepreneurship is aimed at sustainable regeneration of local fishing and sustainable life in fishing communities centred on the keywords of fishing and fishing communities. In addition, this has some meaning not only for local people but also for the general consuming public. Japanese fishing and fishing communities are not simply going into a decline - consumers are also becoming less and less aware of their existence. Women fishery entrepreneurship is trying to make efficient use of local resources which are losing opportunities for commercial realisation and to revaluate the food culture of fishing communities, despite the situation outlined above. Through these activities, they seek to communicate the value of fishing and fishing communities to local people, of course, as well as the general consuming public. The success of these activities cannot be determined simply by economic barometers. These activities are essential for the revitalization of societies and communities of the future. These small activities have the potential to play a role in significantly changing our values, in spite off the current emphasis on market principles.

### **Bibliography**

- Cabinet Office, Government of Japan (2016). White Paper on Aging Society. Tokyo: Nikkei Printing.
- Garcia, S.M. et al. (2012). "Reconsidering the Consequences of Selective Fisheries". *Science*, 335(6072), 1045-7.
- Hamada, Eiji (2011). Seisensuisanbutsu no ryūtsū to sanchi senryaku 『生鮮水産物の流通と産地戦略』 (Fresh Marine Products Distribution and Initiative in Producing Area). Tōkyō: Seizando.
- Hirasawa, Yutaka (1979). *Nihon suisan dokuhon* 『日本水産読本』(Reading Book About Japanese Fisheries). Tōkyō: Toyokeizaisinposha.
- Makino, Mitsutaku; Matsuda, Hiroyuki (2011). Ecosystem-based management in the Asia-Pacific region. Ommar, R.E; Perry, R.I.; Cochrane K.; Cury, P. (eds.), World Fisheries: A Social-Ecological Analysis. Hoboken (NJ): Wiley-Blackwell, 322-33.
- Makino, Mitsutaku (2011). Fisheries Management in Japan. New York: Springer.
- National Association of Fisheries Cooperative's Women's Groups (2015). "Overview of National Association of Fisheries Cooperative's Women's Groups" [online]. URL https://www.zengyoren.or.jp/zengyofuren/shokai/gaiyo.html (2016-09-12).
- Okada, Tomohiro (2004). Nōson keizai junkan no kōchiku 「農村経済循環の構築」 (Structuring of Farming Community's Economic Circulation). Tashiro Yoichi (ed.), Nihon nōson no syutai keisei 『日本農村の主体形成』 (Making Agents in Japanese Farming Communities). Tōkyō: Tsukuba Shobo, 55-90.
- Sano, Masaaki (2015). Nihonjin ga shiranai gyogyō no daimondai 『日本人が知らない漁業の大問題』(The Big Issues Japanese Do not Know). Tōkyō: Shinchosha.
- Shioya, Kimiko (2013). "Umi no sachi de tīki ni egao to nigiwai wo-Sanmi Sea Mothers no chosen" 「海の幸で地域に笑顔と賑わいを一三見シーマザーズの挑戦 一」 (Smile and Merriment for Community Using Food from the Sea: Challenge of Sanmi Sea Mothers). Dai 18 kai zenkoku seinen/josei gyogyōsha kōryū taikai shiryō『第 18 回全国青年・女性漁業者交流大会』 資料 (18th National Youth and Women Fishers Exchange Contest data), 173-180.
- Soejima, Kumi (2003). *Sotokara no Me, Wakamono no Me* 「外からの目・若者の目」(Sight from outside and sight of young people). *Gyōkyōkeiei*, 41(9), 18-22.
- Soejima, Kumi; Yano, Izumi (2004). "Engangyoson niokeru josei rōdō no saihyōka to sosikino yakuwari" 「沿岸漁村における女性労働の再評価と組織の役割」(Re-evaluation of Women's Labor and Role of their Group in the Coastal Fisheries Village: The Case of Hikoshima, City of Shimonoseki in Yamaguchi Prefecture). *Journal of Rural Economics*, 76 (3), 160-8.

- Soejima, Kumi (2014) Gyoson no kurashi no kōjō to 'chīsana kyōdō' gyoson josei guruppu no katsudō tenkai to kanōsei 漁村のくらしの向上と「小さな協同」漁村女性クルップの活動展開と可能性 (Small Cooperation and improving life in Fishing Communities: Developing Empowerment and Possibility for Women's Entrepreneurship Groups). Kyōdōkumiai kenkyū 『協同組合研究』(Japanese Society for Co-operative Studies), 34(1), 21-30.
- Tokyo Fisheries Promotion Foundation; Umi Hito Kurashi Forum; Fishery Communities Planning Co, Ltd (2011). Zenkoku gyoson josei group katsudō jittai tyōsa houkokusyo 『全国漁村女性グループ活動実態調査報告書』 (Report of Across-the-Country Women's Groups' Activities Situation). Tōkyō: Tokyo Fisheries Promotion Foundation.

### Small-scale Fisheries in Japan

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

# Restoration of Eelgrass Beds by the Fishermen of Hinase in the Seto Inland Sea, Japan

Tetsuo Yanagi (Kyūshū University, Japan)

**Abstract** The paper reviews the activities of fishermen who are members of the Hinase Fishermen's Union in the Seto Inland Sea, Japan, their work to restore damage to eelgrass beds that has been caused over a period of more than 30 years, and the establishment of a sixth industry in the area.

**Summary** 1 Introduction. – 2 Rehabilitation of Eelgrass Beds. – 3 ICM. – 4 Collection of Seabed Debris. – 5 Direct Selling. – 6 Oyster Culture. – 7 Fish Farm. – 8 Eelgrass Summit.

**Keywords** Restoration of eelgrass beds. Oyster culture. Satoumi. Sixth industry.

### 1 Introduction

Hinase, a town in the eastern part of Okayama Prefecture in the eastern Seto Inland Sea (the largest semi-enclosed sea in Japan, fig. 1), has a population of about 11,000. Although it was once called "a big fishing town with a thousand fishermen's houses", the ratio of fishermen is now only 3%.<sup>1</sup>

The Hinase Fishermen's Union numbered 107 full members and 62 associate members as of June 2008. It is famous for developing the drifting net used for mackerel and a small seine net (fig. 2), which are installed around the Hinase fishing grounds (fig. 3). Before World War II, some fishermen moved to Nagoya, Aichi Prefecture in the East and even to Korea in the West with their advanced technology. The seine net has been called the Hinase net (*tsubo-ami* in Japanese). There are many fishermen from Hinase who have relocated to Yamaguchi, Oita, and Fukuoka Prefectures in the western part of Japan.

The Union admits only one full member from each family for the conservation of fishery resources (by preventing over-fishing), and younger, but

f 1 Statistics and information were obtained from the Hinase Fishermen Union. Pictures are taken by the Author with the cooperation of Hinase Fishermen Union.

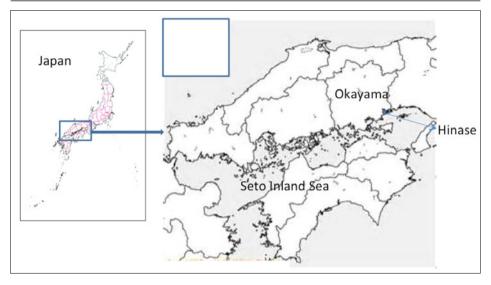


Figure 1. The Seto Inland Sea and Hinase town

not the eldest sons, must migrate to other places to continue fishing. As a result, young fishermen went to Korea and China to fish mackerel with drifting nets before World War II.

By the end of the 1960s, however, the fish catch by fishermen's Union had decreased and many full members had grown old.

The main fishing activities of the present Hinase Fishermen's Union use small seine nets (about 50 families), drifting nets for mackerel (from April to June), drifting nets for bonito (July to August – about 50 families), small trawling nets (about 50 families), oyster culture (about 50 families), and seaweed culture (2 families).

# 2 Rehabilitation of Eelgrass Beds

The areas of eelgrass (sp. *Amamo*; *Zostera marina*) beds in the Hinase coastal area decreased from the early 1960s, mainly because of water pollution in the Seto Inland Sea (fig. 4). A huge typhoon in 1976 caused extensive damage to the eelgrass beds, which failed to recover after that, mainly due to the decrease in the transparency and the inflow of agricultural chemicals from the land.

Eelgrass beds grow in calm coastal sea areas with a sandy silt seabed. They weaken strong tidal currents and strong sunlight, and become the breeding place for squid and the nursery grounds for small fish, as small animals on the leaves of the eelgrass are good bait for them.



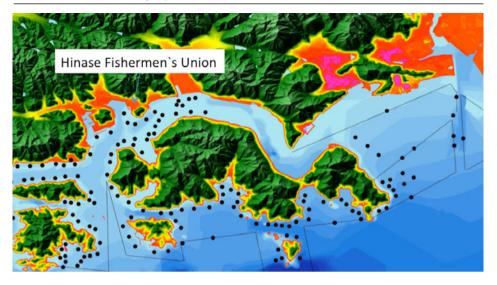
Figure 2. Small seine net (Hinase net, 'Tsubo-Ami' in Japanese)

Some members of the Union used small seine nets with shrimp, blue crab and coastal fish such as red sea bream as their primary targets. They thought that the main reason for the decreased fish catch was the reduction of eelgrass beds' areas, so, in 1985, they began to rehabilitate them under the guidance of scientists from the Okayama Prefectural Fisheries Experimental Station.

Eelgrass is a plant (grass) with flowers and seeds. It can expand its growing area by seeding and by spreading roots (rhizomes). The seeds drift down to the seabed in June, germinate from November to January, and grow until July. It stops growing in summer and becomes a drifting grass, but grows again in autumn.

The rehabilitation of an eelgrass bed is possible using two methods, namely sowing seeds or transplanting roots. The fishermen of the Hinase Fishermen's Union adopted the idea of sowing seeds. In May or June, they gathered seeds from the eelgrass beds and preserved them in a net under the rafts used for oyster culture. They selected good-quality seeds in October and sowed them in suitable areas within the Hinase fishing grounds in November and December (fig. 5).

In 1985, the fishermen sowed 150,000 seeds in eight areas (fig. 6, A to G). By 1988, the number of seeds sown increased to 2,200,000. Area A in figure 6 was an eelgrass bed that had disappeared in 1985 when seeds were sown for the first time. In the following spring, a small patch of eelgrass bed was discovered in area A that survived until autumn 1986. Area B, where they had sown seeds in 1986 and 1987, has now become an es-



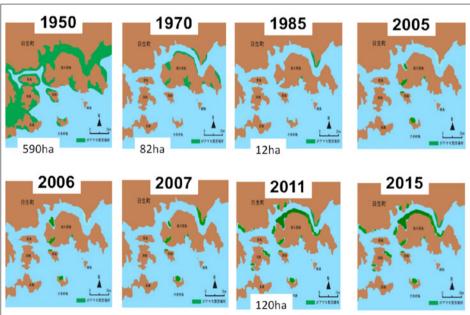
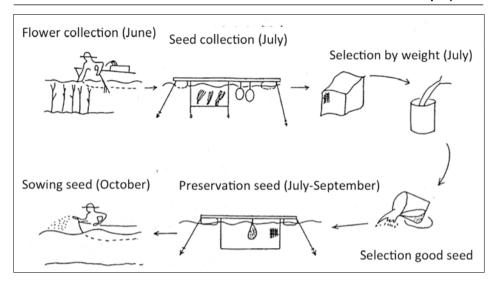


Figure 3. Location of small seine net (black circles) in Hinase fishing ground (from (NPO) Satoumi Research Institute)

Figure 4. Change of Eelgrass beds in the Hinase fishing ground



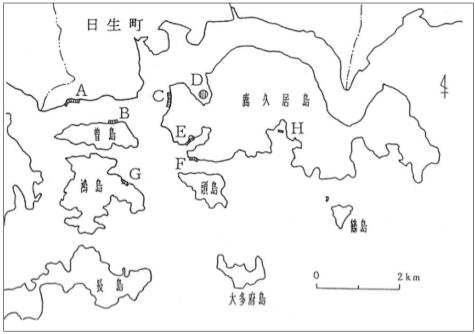


Figure 5. Method for sowing eelgrass seed Figure 6. Areas of eelgrass seed sowing (A-G)

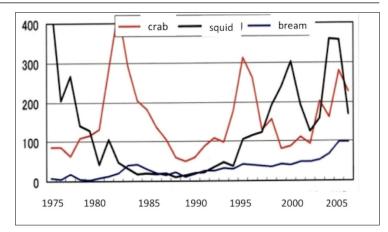


Figure 7. Variation in fish catch in the Hinase fishing ground

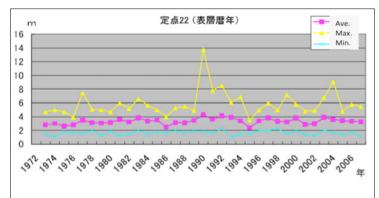


Figure 8. Yearto-year variation in transparency of the Hinase fishery ground (from Okayama Prefectural Fisheries Station)

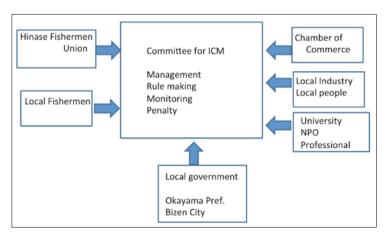


Figure 9. The committee for Integrated Coastal Management at Hinase



Figure 10. Hinase agreement.

tablished eelgrass bed. However, beds have not formed where seeds were sown in area C. The rehabilitation of eelgrass beds in area D succeeded after improvements were made to the characteristics of the seabed by introducing materials such as oyster shell. In areas E, F and G, rehabilitation was also successful, while it failed in area H, as sand covered the seabed.

The fishermen have reached a number of conclusions on suitable areas for sowing the seeds of eelgrass:

- 1. areas with a weak tidal current that cannot move the seeds;
- 2. areas with sandy silt beds where the eelgrass can spread its roots;
- 3. areas with previous eelgrass beds;
- areas with a water depth of 0.5-1.0 m at low tide so that sunlight can penetrate as far as the sea bottom;
- 5. they also figured out that the establishment of a new eelgrass bed takes several years.

Recovery of areas of eelgrass beds went from only 12 ha in 1985 to 120 ha in 2011, as a result of the fishermen continuing such activities, and the fish catch of swimming crab, squid, and red sea bream by seine nets also recovered (fig. 7). Such recovery may be partially the result of the increase in water transparency (Secchi disk depth) in this area (fig. 8). A manual for eelgrass bed rehabilitation was produced by Okayama Prefecture based on their experience in 1990.

### 3 ICM

The Committee for ICM (Integrated Coastal Management) was established in 2010 (fig. 9). Bizen City Office convened this committee and became its secretariat. Committee members discuss what actions are needed for the establishment of a sustainable coastal area at Hinase.



Figure 11. Marine debris deposit place at Hinase Fishing Port



Figure 12. Fish market (Gomi-no-Ichi) operated by Hinase Fishermen's Union

The Hinase Fishermen's Union (fishermen), Okayama Prefecture (local government officers), Okayama Co-op (consumers) and the Satoumi (sato 里, 'village' and umi 海, 'sea') and Research Institute (scientists) agreed to cooperate in the rehabilitation of eelgrass beds in the Hinase area in May 2012 (fig. 10). Following this agreement, a number of families and their children joined in the fishermen's activities.

### 4 Collection of Seabed Debris

Fishermen who use small trawling nets suffer from massive marine debris on the seabed, which gets into the trawling nets. With the aid of national government funding, the Hinase Fishermen's Union collected 182.1 m³ of marine debris on the sea bed (burnable, 40%; unburnable, 60%) from an area of 11.4 km² from 1982 to 1984 using 253 fishing boats and 413 fishermen (fig. 11). The marine debris they collected was processed in a debris process factory belonging to the town hall with the help of Bizen City Office. The total cost was 9,790,000 Japanese Yen.

Since that time, the fishermen have continued to clean up the sea bed on a voluntarily basis. At the beginning, 12 tons/day of marine debris was collected, but it has recently decreased to 5 kg/day. However, the amount of marine debris collected increases after heavy rain or a passing typhoon, as massive amount of debris enters through rivers from the land.

# 5 Direct Selling

Half of the fish caught by the Hinase Fishermen's Union is sold by brokers and the other half by direct sales at the Gomi (gomi 五味 'five taste')-no-Ichi

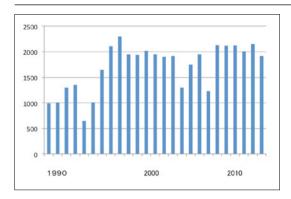


Figure 13. Year-to-year variation in cultured oyster harvest at Hinase from 1989 to 2013



Figure 14. Fish-farm project in Hinase

(*ichi*  $\dagger$  'market'), the fish market, which is operated by the Fishermen's Union itself (fig. 12). Hinase is reasonably close to large cities – not just Okayama, but places such as Kobe and Osaka, so a variety of individual and commercial consumers come to this shop every day.

### 6 Oyster Culture

Oyster culture has become popular in Hinase since the 1980s, mainly due to market demand. Oyster culture is seasonal, taking place in winter, and the cultivation of seabeds where the oyster culture grounds are located is conducted by small trawling net fishermen after the oyster harvest season so as to conserve the fishing grounds used for oyster culture. The accumulated organic matter on the seabed is easily decomposed by such cultivation. About 100 young people from China work in the factory, which is operated by the Hinase Fishermen's Union, processing the harvested oysters.

The harvest of cultured oysters increased after the expansion of eelgrass beds in the 1990s, as shown in figure 13. The win-win relation between oyster culture and eelgrass bed rehabilitation has been established in the Hinase coastal sea area. Oyster culture is of benefit to eelgrass beds as; 1) oyster rafts decrease the wave height and protect the eelgrass beds, and 2) oysters graze on the phytoplankton and detritus, and thereby increasing the transparency of the water which results in expansion of eelgrass beds. Conversely, eelgrass beds benefit oysters as; 1) expanded eelgrass beds decrease the water temperature during the summer due to the curtain effect on the sea surface, and such decrease in water temperature reduces oyster mortality during the hot summer months, 2) expanded eelgrass beds increase DO concentration through photosynthesis resulting in a decrease in oyster mortality, and 3) the diatoms, animals attached to the eelgrass leaves and dead eelgrass become good food for cultured oysters and result in an increment in the rate of oyster growth.

#### 7 Fish Farm

The Hinase Fishermen's Union has proceeded with constructing a fish farm in their fishing grounds, as shown in figure 14. It is composed of rehabilitated eelgrass beds near the coast where spawning is carried out and the nursery ground for juveniles is formed. The artificial reefs for juveniles occupying a small area have been installed near the eelgrass beds. Another artificial reef for medium sized fish with a moderate inner space has been created in the central area of the farm, and those for adults using a large inner space are installed in the offshore area near the cultured oyster rafts for their feeding area. The rafts for cultured oysters



Figure 15. Eelgrass Summit in Japan at Hinase

have become another habitat for juveniles. Along the boundary between the Hinase Fishermen's own fishing ground area and the common fishing ground used for all other fishermen, wave mitigating devices on the water surface have been deployed by the local government to prevent newly-planted eelgrass beds. Such a zoning scheme not only aims to protect fish habitats but also considers the health of the entire marine area in order to achieve sustainable use of future fish resources.

Planning the marine space for this fish farm is carried out by local fishermen, sports fishing groups, the local government, scientists and other stakeholders under the umbrella of the local ICM shown in figure 9.

# 8 Eelgrass Summit

The 10th Eelgrass (*amamo* in Japanese) summit in Japan was held from the 3rd to the 5th of June 2016 in Hinase, which is well known as the spiritual home of Eelgrass bed rehabilitation in Japan (fig. 15).

The scientific symposium entitled, *The present status and future of Eelgrass bed rehabilitation* was held on the 3rd of June in a meeting room of the Hinase Fishermen's Union with about 200 people attending. Ten scientists presented their scientific results on the activities to rehabilitate eelgrass beds in the whole area of Japan. Some scientists talked on the variation in fish species and benthos species and their biomass, related to the expansion of eelgrass beds. Others spoke on the role of eelgrass beds as blue carbon, and one scientist discussed the role that eelgrass beds

play in killing harmful algal bloom. The guide lines for the rehabilitation of eelgrass beds were introduced by three government agencies. In the general discussion, the usefulness of stopping the transfer to the climax stage of eelgrass beds for increasing gathered fish species and biomass, that is, the mutual interaction of humans and nature, was shown to be important for increasing biodiversity in eelgrass beds.

After the opening ceremony on the 4th of June at Hinase City Hall, the students from Hinase Junior High-School presented a drama entitled, People Sowing Seeds in the Sea lasting about 30 minutes. It demonstrated the successful story of eelgrass bed rehabilitation by Hinase fishermen. The drama greatly impressed the 600 or so participants at the summit. The first part on this day was a panel discussion on the history of Eelgrass beds rehabilitation in Hinase, and six fishers (five men and one woman) and one NPO scientist introduced the history of activities in the area. The second part was a panel discussion on the rehabilitation of seven eelgrass beds from Sendai in the northern part of Japan to Kagoshima in the south. The third part was a panel discussion on the expansion of goods related to Satoumi, and six people introduced their activities related to the discovery, innovation and sales strategy of the Satoumi brand from their own region.

Also at Hinase City Hall, marine environment conservation activities were introduced on the morning of the 5th of June by students from 12 high-schools from all over Japan with about 500 people in the audience.

The summit ended very successfully with the Hinase Declaration adopted by all the attendees at the closing ceremony in the afternoon of the 5th of June.

The leader of Hinase Fishermen's Union declared: "We have to continue our activities of the Eelgrass beds rehabilitation not only for us but also for our grandchildren, and develop a 'sixth industry', which means the combination of the primary industry of fisheries, the secondary industry of oyster processing and the third industry of direct sales of the harvest for the future of Hinase" (Author's personal annotation).

# **Bibliography**

Yanagi, Tetsuo (2006). *Sato-umi: a New Concept for Coastal Sea Manage-ment*. Tōkyō: TERRAPUB.

Yanagi, Tetsuo (2013). Japanese Commons in the Coastal Seas: How the Satoumi Concept Harmonizes Human Activity in Coastal Seas with High Productivity and Diversity. Tokyo: Springer.

### **Small-scale Fisheries in Japan**

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

# Fishing with kuji

Shūichi Kawashima (Tōhoku University, Japan)

**Abstract** Existing studies of early-modern and modern fishing maps from across Japan have not examined how they were used by fishers themselves. This paper focuses on practices of 'fishing with kuji' (籤,lottery), in which lottery systems are used to determine fishing area usage, to understand the folk customs associated with fishing area maps. This paper focuses primarily on coastal areas of the eastern Kii Peninsula. Diverse fishing methods, such as gill nets and four-armed scoop nets, are used by different villages in this region. However, the villages each face a limited availability of coastal fishing areas. Out of necessity, the fishing areas must be divided, giving rise to fishing area maps, and the practice of assigning areas to fishers using kuji. Each region has also developed unique practices which are used during fishing seasons. These kuji have their origins in religious practices. However, an examination of the kuji draws in these coastal fisheries reveals both a method to ensure the equal distribution of fishing opportunities, and a view of a world in which fishers are constantly subject to the harsh whims of nature.

**Summary** 1 Introduction. – 2 *Ikauchi* and *ebiami* in Tsuga. – 3 Fishing Maps beneath Bridges. – 4 The Adoption of the Lottery Practice: The Case of Hobo, Kumano-shi. – 5 The Two Fishing Areas. – 6 Towards Fishing Areas Exclusive to Hobo. – 7 *Shiro uo* Fishery in Ōtagawa. – 8 The *tataki ami* fishery of Mikatakō Lake. – 9 *Tairyō kuji* and Bonten *kuji* of Izu Iwachi. – 10 The *kuji matsuri* festival of Kōzushima. – 11 The Hatahata Festival of Oga. – 12 The *batori* of Shimokita. – 13 Conclusion.

**Keywords** Coastal fishing. Map of fishing areas. Fishing regulation. Lottery. Festival.

### 1 Introduction

Until now, studies of maps of fishing areas discovered in the Japanese archipelago from the early modern and modern periods have not approached them from the perspective of how the maps were used by fishermen themselves. This paper explores the actual use of these maps in fishing areas, by focusing on how areas are assigned by drawing kuji ('lottery' – kuji wo  $h\bar{i}te$  kimeru).

This paper focuses on coastal fishing villages from the eastern areas of the Kii Peninsula, to the end of the Ria coast at Nigi Shima Bay along the Shima Peninsula, and through Shionomisaki to Shichirihama. The main fisheries addressed in this paper are small scale coastal fisheries, including the *ise ebi* イセエビ (lobster) fishery in Hobo-cho, Kumano, Mie Prefecture,

the *shiro uo* シロウオ (ice goby) fishery in Shimosato, Nachikatsuura in Wakayama Prefecture, and the *aori ika* アオリイカ (bigfin reef squid) in Tsuga, Kushimoto, Wakayama. These fisheries use various methods, including gill nets, four-armed scoop nets, and  $tataki\ ami$  (in which fishermen drive fish into nets by beating the sea surface with sticks), but they have in common the fact that they are concentrated in limited fishing areas along coasts. Out of necessity, the fishing areas are divided, so they then require the production of maps of the divisions. These divisions are distributed by kuji or lottery. Each region has its own method for operating its fisheries during fishing seasons.

For instance, fishermen in the *aori ika* fishery in Tsuga determine the borders of the fishing areas using a map drawn on a wall underneath a bridge, after which they assign divisions by kuji. The map of the fishing areas is not static, but it is understood by the fisherman to be fluid when in use.

In contrast, in Hobo and Nigishima (both in Kumano-shi) certain regulations mediate discussions over *ise ebi* fishing areas. These discussions result in the drawing of new fishing areas maps. These maps are reassessed whenever an event such as a boundary dispute occurs, which can result in new names for fishing areas. However, the fishermen themselves possess an embodied knowledge of the fishing areas, and do not need to refer to the map when they are on the sea.

In the *shiro uo* fishery of Shimosato, a similar *kuji* system is used to assign fishing areas, but no map for this purpose exists. This paper will begin by examining how these fishermen apprehend the intangible fishing areas that are not represented by visual maps, and how they divide fishing areas fairly among themselves. The paper will then compare this case with an example from elsewhere in Japan (the Tataki fishery in Mikata-ko, Fukui Prefecture).

In the following section, the paper will describe how *kuji* are used in the fisheries on the Kii Peninsula, Izu Peninsula, Oga Peninsula, and Shimokita Peninsula. The focus of this section will be on bora ボラ (flathead grey mullet) net fishing and katsuo カツオ (skipjack tuna) pole fishing in Iwachi, Izu Matsuzaki-cho, Shizuoka Prefecture, takabe タカベ (yellowstriped butterfish) and isaki イサキ (striped pigfish) kincha キンチャ (drive fishing) on Kouzu-shima, Tokyo, the hatahata ハタハタ (Japanese sandfish) fishery in Oga-shi, Akita Prefecture, and tara タラ (cod) net fishing in Wakinosawa, Mutsu-shi, Aomori Prefecture. In contrast to the fisheries of the Kii Peninsula presented in the first half of this paper, kuji are drawn in each of these areas the fishery's local shrine (Moro Iso Shrine, Monoi Minamikoto Shrine, Shinzan Shrine and Satake Shrine, and Ichikishima Shrine, respectively) on festival days. Moreover, these lotteries differ from those in Kii in that they are not used to determine the areas assigned to individual fishermen, but to assess the overall condition of the fishery, discern days when good catches can be expected, and identify the locations that should

be fished. In this respect, these kuji are a form of divination. However, both the kuji of the Kii peninsula, and those in the other areas discussed are similar in that they view the results of their kuji to be a reflection of the will of the gods. The first set of examples can then be seen as the extension of the kuji selection method to address more practical purposes, but they still must be understood against the background presented through the second set of examples.

In order to access fishermen's lived experiences through local vocabularies, this paper will rely on fishing terms used in the field sites, particularly in the use of terms that combine fish species and fishing method. For instance, *ikauchi*, which is addressed in the next section, combines *ika* (species) and *uchi* (fishing method) to refer to the use of Iso beating seine fishing methods to catch *aori ika*, whereas *ebiami* refers to the gill net (*sashi ami*) fishing of *ise ebi* (lobster).

# 2 Ikauchi and ebiami in Tsuga

This section will examine the *kuji* in fishing villages on the east coast of the Kii Peninsula, including Tsuga in Kishimoto-cho, Wakayama Prefecture, Hobo in Kumano-shi, Mie Prefecture, and Shimosato in Nachikatsuura, Wakayama Prefecture.

In Tsuga, the main part of the fishing year is devoted to the *ebiami* ⊥ ビアミ (lobster gill net fishing), which operates from October 1 until April 30. Initially, this fishery involved only one household, but currently seven households participate. Following the end of the ebiami season, ikauchi イカウチ (Iso beating seine fishing of squid) is carried out from May 1 until July 31. In Tsuga, this fishery is also called tachiika, but in contrast to ebiami, tachiika is seen as a side occupation. However, there is a regulation that prevents people who are not involved in ikauchi from participating in ebiami. In addition, from March 1 until August 31, there is kamasu カマ ス (barracuda) fishing as well as dive fishing by men, known as Amairi. In Amairi, tokobushi (small abalone - sulculus diversicolor supertexta), sazae (horned turban), awabi アワビ (abalone), funori フノリ (gloiopeltis genus), hijiki ヒジキ (sargassum fusiforme), and tengusa テングサ (Gelidiaceae family) are collected on specified days. The majority of ikauchi fishing takes place during June, but there is no significant ikauchi in the three months from July to August, when fishermen focus on amikiyori (net mending). Here, the kuji pertains to ebiami and ikauchi.1

 $<sup>{\</sup>bf 1}~$  As described on April 29, 2016 by Hide Kushino (born in 1927) of Tsuga, Kushimoto-chō, Wakayama Prefecture.

My actual observations of *ikauchi* in Tsuga took place on May 26, 2008, while I observed *kuji* draws on April 30, 2011 and April 29, 2016, before two *ikauchi* seasons. The next section reports on these observations, and discusses the *ebiami* in relation to them.

As described in my book *The People Who Hunt Fish* (Kawashima 2011, 261-2), the *ikauchi* method was transmitted to Tsuga from Arita in Kushimoto-cho after World War II, between 1952 and 1953.

As indicated by the origin of uchi in ikauchi from the verb utsu (to beat), the ikauchi method involves beating the surface of the water near the ta-kamo  $\not$   $\not$   $\not$   $\not$  (a species of algae) where the reef squid spawn with a thick conical wooden stick used to drive them out called  $\bar{o}tab\bar{o}$ . The bubbles produced in the water drive the squid out. A net is positioned towards the open water, and the sea surface is beaten with  $\bar{o}tab\bar{o}$  to drive fish from the shore to the sea. This method is one type of tataki ami fishing. Male squid also gather as they pursue females. Tataki ami is only effective in calm waters rich in algae edged by U or V-shaped shores.

The ōtabō used for fishing is made from the hardwood of the ubame gashi oak [quercus phillyraeoides], which is also used to make charcoal. The bats are cone shaped and approximately 70 cm in length. The boats carefully follow the squid on a zigzag path, while fishermen alternately beat the sea surface on the starboard and port sides of their boats. This is because the squid are spawning, and do not easily leave the algae and can be left behind. In order to prevent squid that have left the shore from turning back, stones kept on the boats may be thrown into the water. The nets used are standing nets 100 ken long (181.8 m) and 3 hiro tall (3 fathoms, 5.49 m) which are placed just outside small bays. The squid are driven into the net from the shore.

The small boats called *isofune* used in *ikauchi* carry oars, but these are used only to quietly move the nets into position. Drive fishing is not limited to *aori ika*, but many boats continue to use oars because there is a cardinal rule that one must not be detected by the fish. After quietly manoeuvring the boat using an oar, the fisherman takes a rope tied to the  $\bar{o}tab\bar{o}$  in his hand, and forcefully beats the sea surface alternating left and right. The sound of the  $\bar{o}tab\bar{o}$  reverberates across the quiet shore, as they are thrown down into the water.

*Ikauchi* takes place three times in one day. Each boat driving squid typically carries two members of the same family. The first *ikauchi* usually begins at 7 or 8 a.m. The squid are driven for only approximately five minutes, and the entire fishing process requires only twenty minutes. However, the fishermen say that this method is not effective unless the squid are driven carefully. When one session is completed, the fishermen must wait three hours because the squid do not like murky water. The second session thus takes place at around 1 p.m., while the third takes place from 3 to 4 p.m. Between the sessions, the fishermen may return home and nap,

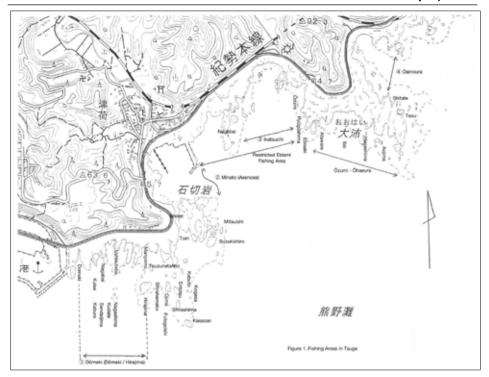


Figure 1. Fishing areas in Tsuga

making this a relaxed fishing method. Low tides are the best for fishing, while at high tide it can be difficult to find a good rhythm (nori ga warui). Ikauchi is a fishing method that depends on the ebbing of the tides. It takes advantage of the tendency of squid to go out to sea during low tide, but in actuality, most squid appear during high tide. The fishermen select their fishing times to balance the quantity of their potential catch with the likelihood of a good catch, making it resemble gambling.

Table 1. Changes in Ikauchi Fishing Areas in Tsuga

2007	2008	2011	2016
1 Asenose	Hirajima / Dōmeki	Dōmeki	Dōmeki
2 Ikatsuchiura	Asenose	Minato	Mitsuiso
3 Ōzumi	Ikatsuchi	Ōzumi / Ōhaeura	Ōzumi
4 Ōhaeura	Ōzumi / Ōhaeura	Ōainoura	Shitate

There are four fishing points in the Tsuga area. From east to west, they are Ohaeura, Ozumi, Ikatsuchiura, and Asanosu. However, these *wango* (ports) change slightly from year to year (table 1, fig. 1). Only one fishing boat can work each *wango*, so the nine boats involved in *ikauchi* in Tsuga in 2011 drew *kuji* to determine the order in which they would fish the areas, among which they would rotate each day.

Table 2. Fishing Vessels Operating on May 26, 2008

Vessel Name	Fishing Area	
Hidemaru	Hirajima / Dōmeki	
Tatsumaru (Father)	Asenose	
Eikōmaru	Ikatsuchi	
Ichieimaru	Ōzumi / Ōhaeura	
Hisaemaru	Resting	
Yamazakimaru	Resting	
Rinkichimaru	Resting	
Tatsumaru (Son)	Resting	
Fukumaru	Resting	
Seifukumaru	Resting	

The following day, the Seifukumaru went to Hirajima / Dōmeki, and Hidemaru moved to Asenose. The Ichiemaru went to rest.

Similarly, ten boats participated in 2008; each of them would work different areas for four days. After finishing the *ikauchi*, they would fish for shrimp around Kii Oshima or work at night with *kenken* (trolling gear) for six days, as they waited for their next four-day opportunity. Clear days are best for this fishery, but the assigned order and place cannot be changed for reasons of bad weather, which means that the success of each boat can differ a great deal. The fishing order for boats in 2008 is shown in table 2. *Ikauchi* is said to be a form of fishing that is almost a hobby, but the price of the *aori ika* at market is quite high (approximately 1,500 yen per kilogram in 2008), making a good catch a significant source of income. Except for days when the weather is bad, few boats fail to take full advantage of the four days allotted to each of them.

# 3 Fishing Maps Beneath Bridges

This section describes how kuji draws are actually conducted. The kuji in Tsuga consists of two draws. The first preliminary draw ( $yosen\ kuji$ ) determines the order that participants will draw kuji in the subsequent main draw ( $hon\ kuji$ ). These two draws take different forms. In the preliminary



Figure 2. The *yosen kuji* (left) and *hon kuji* of Tsuga (April 30, 2011)
Figure 3. Dividing the fishing areas on a map beneath the bridge (April 30, 2011)



draw, wood blocks bearing stickers with Arabic numerals are placed in a bag marked  $Ebi\ Ami\ Kuji\ Ire\ えび網くじ入れ$  (shrimp net kuji bag). In the main draw, bamboo rods labelled with numbers – in the format Kanji numeral (Arabic Numeral) – on their ends are placed in a tin tea can, whose lid has a small opening (fig. 2).

In 2011, before assigning the four fishing areas, the nine groups of fishermen gathered on the draw day (April 30) beneath a bridge near the fishing port at 1 p.m. to determine whether the *ikauchi* draw should take place. The gathering can only be called by the *sewanin* 世話人 (person responsible for the fishery), or the person responsible for the *ebiami*. In both *ikauchi* and *ebiami*, siblings, parents, and children have the right to fish as one household even if they are living separately. In the past, as many as 37 or 38 households were involved in this fishery.

Fishing rights go into effect as soon as the *ikauchi* draw is completed, so the group takes the weather into account when deciding whether or not to begin fishing. This decision is made by gathering small stones scattered nearby and marking them with a permanent marker. A circle (O) indicates that they are in favour of holding the lottery, while an X indicates that they are against. These stones are placed face down on a board on the ground by the *sewanin* of the fishery. Once the stones have been placed, the *sewanin* turns over each stone and counts the number of circles and Xs. If a simple majority is in favour, then the *kuji* draw place. On the day observed, the group voted in favour of holding the draw.

Next, a rough topological map of the Tsuga area is drawn beneath the bridge, which is used to determine four equal fishing areas through discussion among the fishermen. The four areas are drawn so that the catch in each area will be equal, and the men make small adjustments with a wet cloth in hand as they draw the lines (fig. 3).

After the four areas have been determined, the preliminary *yosen kuji* draw begins. The order in which the people will draw in the preliminary *kuji* is determined through games of rock-paper-scissors. The *sewanin* holds the bag of blocks in his hands, and each person draws a block one by one. The blocks determine the order for the main draw. The people who draw the 1st to 4th positions in the main draw received fishing rights effective from that day, regardless of the weather. The other positions follow on subsequent days (fig. 3).

A similar *kuji* draw takes place at the beginning of the *ebiami* season, but with several small differences. First, fishing areas are allotted to all participants at the same time, instead of being spread across several days. Second, the draw is held both on the first day of the season as well as at the *hatsuka yami*, or dusk on the twentieth day of the month on the lunar calendar. This is because *ebiami* is a nighttime fishery that cannot take place when the moon is visible. During the fishing season, additional draws take place after the fishermen have rotated through all the fishing areas.



Figure 4. Drawing the *hon kuji* (April 30, 2011)

Specifically, when there is an even number of fishing points to be allotted to an even number of fishermen, each rotation is completed guickly and in many cases the fishermen will return to their original fishing points. In these cases, fishermen may sometimes choose to 'skip one or two' (hitotsu tobi or futatsu tobi) of the intermediate points as they make their rounds. One of the reasons for skipping fishing points in this way is to avoid over-fishing nearby areas where fishing is restricted, which may provide good catches even if they are fished for two consecutive days. The restricted fishing areas are not included in the maps drawn beneath the bridge, and points to the west and east of the restricted areas are drawn on the walls on either side of the road that passes beneath the bridge. Third, regardless of the weather on any particular day, the fishing points are not moved. It is ultimately up to the sewanin to judge whether or not fishing will take place, meaning that there the dates in which all fishermen work are the same. In contrast, in ikauchi the fishing points move mechanically, and the judgement of whether to fish or not on a particular day is left to individual fishermen.

To discuss the introduction of *kuji* draws in the operation of the *ebiami* fishery, the next section will describe the case of Hobo, Kumano-shi, in Mie Prefecture.

## 4 The Adoption of the Lottery Practice: The Case of Hobo, Kumano-shi

Currently, the primary fishery in Hobo, Kumano-shi, Mie Prefecture, is *ebiami*, similar to the aforementioned Tsuga. The fishing season is from October 1 to April 30. During this season, one fishing period is defined to fit the twenty dark nights from the 19th of one month on the lunar calendar to the 9th of the following month. In fact, the fishing takes place on approximately fifteen days. From May, following the clean-up of the *ebiami*, the fishermen troll for *katsuo*. At the beginning of autumn, *surumeika* (Japanese squid) fishing becomes primary. During the *ebiami* season, some fishermen will also catch *yariika* (spear squid) from the end of December to January.

In the past, *ebiami* had been an occupation for the elderly. This is because, up until Japan's period of high economic growth, young men from Hobo, went to Shukutaso (in *Minami* Ise-chō, Mie) to work on boats pole fishing for *katsuo*, like many men from other fishing villages in Mie Prefecture. Traditionally, an *ebiami* catch of 30 to 35 shrimp per day was considered good, but today twice as many may be caught in one day.

Both one-ply and three-ply nets are used in *ebiami*. The one-ply nets have a mesh size of approximately 9 cm  $(3 \, sun)$  with each sheet or  $j\bar{o}$  81.8 metres  $(45 \, ken)$  long and 2.1 metres  $(1 \, hiro \, 1 \, shaku)$  deep. The three-ply nets have a mesh size of 7.5 cm  $(2.5 \, sun)$ , with each  $j\bar{o}$  100 metres  $(55 \, ken)$  long and 1.5 metres  $(1.5 \, hiro)$  deep. It is standard practice for boats to carry four one-ply net mats and four three-ply nets for a total of 8  $j\bar{o}$ .

In *ebiami*, nets are placed in the sea at approximately 3 p.m., after which the boats return to port. At 8 p.m., the boats go back out to sea to raise their nets, before heading home, until midnight, when the nets are placed again. They are raised once more at dawn at a time known as *majimi*, approximately 5 a.m. The fishermen do sleep for short periods, but the *ebiami* season is a time during which rest is scarce.<sup>2</sup>

In the past, conflict over *ebiami* fishing areas between Hobo, which is situated at the mouth of Nigishima Bay, and another village known as Nigishima, located further inside the bay, was intense. Both villages held rights to fish the surrounding sea. This situation was resolved by a fisherman, Toshi Yamashita (born in 1944) of Hobo, who created a set of fishing regulations.

In the late 1980s, Yamashita was involved in *ebiami* during the winter, and troll fishing for *katsuo* when schools of tuna begin to disperse in July and August. At the time, Nigishima's *katsuo* troll netting was centred in

 $<sup>{\</sup>bf 2}~$  As described on November 16, 2008 by Toshi Yamashita (born in 1926) of Hobo-chō, Kumano-shi, Mie Prefecture.

Kushimoto, whereas Hobo's nets were based in Sue, by Kii Ōshima. To unload their catches, troll fishers from Sue would take their *katsuo* to the market at Nigishima, while those from Hobo would go to the market at Kushimoto. Through the relations that fishers from Sue and Hobo had through the *katsuo* fishery, Yamashita made friends with people based in Sue. Yamashita would bathe at friends' homes when he docked at Sue, and go with them to collect *biwa* (loquats) in wicker fish baskets (*banjō kago*), deepening their friendships.

One day, when the topic of conversation turned to the *ebiami*, he mentioned the endless conflicts over fishing areas between Nigishima and Hobo, and learned from one of these friends that a set of rules existed in Sue. Yamashita received a copy of these rules to study. These rules were the 'Sue Shrimp Gill Netting Union Rules' (*Sue Ebi Sashiami Kumiai Kiyaku*), which went into effect on September 15, 1988. These were detailed rules that governed the fishery. For instance, one rule governed the fishing period, stating "Each *yami* begins on the 21st of the lunar calendar and ends on the morning of the 10th". In Sue, one *yami* ('hitoyami') refers to one period of fishing. In addition, the 5th section of article 5 of these rules referred to the *kuji* draw: "On the first day of fishing, at least one person from each boat must attend a *kuji* draw to divide their catches".

Yamashita took these rules back to the fisheries cooperative association at Hobo, and established a committee to create a set of rules. Following thorough discussions, the Hobo Ebiami Kumiai Rules were created and implemented on July 25, 1991. In 1993, two years later, Hobo reached an agreement with Nigishima for the two cooperative associations to share a common set of rules – the 'Joint Fishery Rights Usage Agreement' (Kyōdō Gyogyō Kōshi Kyōteisho).

From these rules, part 2, article 16 on the *kuji* is worth closer examination:

- 2. On the 19th of each month on the lunar calendar during the fishing season, at approximately 1 p.m., the fishing boats will draw *kuji* to determine their fishing areas.
- 3. The boats to be moored will be determined by *kuji* draws at the same time.
- 4. Except for non-fishing days determined by the association, the draws will assign consecutive days for fishing (*tōshi ban*).<sup>3</sup>
- 9. If a fisherman should decide to switch to a different catch, such as *ika*, their *ebiami kuji* numbers will become invalid from that day.
- 10. Except for situations affected by important family ceremonies, official duties, or damaged vessels, any vessel that fails to fish for four or more consecutive days will have its *kuji* numbers invalidated.

<sup>3</sup> This article was revised in September 1999.

- 14. When nets have been cast, no vessel shall go between boats that have begun casting their nets, regardless of their *kuji* number.
- 16. When *kuji* have been drawn for an even number of vessels, the first vessel shall be switched for the second round.
- 21. The maximum number of nets that can be cast for each *kuji* number (per two vessels) during fishing is 16. (Hobo Ebiami Kumiai 1994)

Provision 2 explains that fishing areas will be determined by lots drawn on the 19th of the lunar month at the beginning of the yami period, making this day also the first day of fishing each month. Provision 3 refers to "boats to be moored"; around 1990, ebiami was performed by pairs of boats, but today, only one boat is used. The  $t\bar{o}shi$  ban (consecutive kuji numbers) mentioned in provision 4 refers to how fishing areas are rotated each day. Provision 9 is similar to how priority in a given fishing area is assigned for aori ika in Hobo, and how in both the area fished must correspond to the number drawn. They are also similar because the determination of fishing area is made by  $t\bar{o}shi$  ban. However, in this fishery, fishermen are free to decide not to fish on any given day due to the weather, as in the aori ika fishery in Tsuga. Provision 10 draws directly on the rules of Sue, stating that any boat that does not fish for four consecutive days without a valid reason will lose the right to draw a number in the next kuji draw. Provisions 14, 16, and 21 also contain detailed rules.

The method of the *ebiami kuji* draw has not changed from the past. Slips of paper with numbers corresponding to the number of fishermen entering are folded into fourths and placed in a cardboard box. The person who will draw lots squats in a circle with the other fishermen, throws the papers out into the centre, and picks them up. In Sue, the papers are thrown to the ground. The following section will examine the fishing areas selected in this draw.

# 5 The Two Fishing Areas

The 'fishing areas' are determined in provisions 5 through 8 in article 16 of the rules.

- 5. The boundaries of the fishing areas will be drawn according to the conventions of the past, but may be partially modified according to the number of fishing vessels operating in a particular month (*yami*).
- 6. The expansion or shrinking of a fishing area must respect the association of fishing areas within the bay (*uchiura*) and outside the bay (*sotoumi*).
- 7. When a boat assigned to the East passes through Agonohana, or a boat assigned to the South passes through Tateishi, the *uchiura* (coastal) fishing area will be abandoned.

8. When the vessel assigned to the East casts its nets South, or the vessel assigned to the South casts its nets East, each vessel will have renounced its own fishing area. (Hobo Ebiami Kumiai 1994)

The rules governing fishing areas are complex, but as provision 5 indicates ("The boundaries of the fishing areas will be drawn according to the conventions of the past, but may be partially modified according to the number of fishing vessels operating in a particular month (yami)"), the extent of the ebiami fishery was more or less limited, even in the past. However, one characteristic of the rules of Hobo and Nigishima is that each pair of vessels doing ebiami is assigned two areas, one inside Nigishima Bay (uchiura) and one outside of the bay (sotoumi). Either of the areas can be fished, depending on the weather on a particular day. However, only one of the two areas can be fished on any day.

As specified in provisions 7 and 8, the outer *sotoumi* area is divided into the *Minami*-ban area to the south of the bay, and the *Higashi*-ban area to the east. Each of these areas is associated with rights to one inner *uchiura* area. Once a boat given the *Higashi*-ban goes past Agonohana at the mouth of the bay, it gives up its *uchiura-ban*, or its right to fish its assigned *uchiura* area. Similarly, when a boat given the *Minami*-ban passes Tateishi at the mouth of the bay, it gives up its *uchiura-ban*. In either case, other groups may fish for shrimp in the ceded areas. However, the groups that then fish in the *uchiura* area give up their right to fish in the corresponding area outside the bay, permitting other groups to fish these *sotoumi* points.

For example, in 1993, the *sotoumi* was made up of 7 areas in the *Minami*ban, and 11 areas in the *Higashi*-ban, for a total of 18 areas. The *uchiura* also had 18 areas, meaning that 18 groups of fishing vessels could select from 36 areas (table 3). While groups have priority in the fishing areas determined by the *kuji* draw on each day, they must always give up their right to one area in either the *sotoumi* or the *uchiura*. The 18 groups each depart the harbour at the same time twice each day, so difficult negotiations would take place over fishing areas. Eventually, due to the large number of fishermen and fishing areas, relations between Nigishima and Hobo deteriorated.

Table 3. Sotoumi and Uchiura Pairings (November 1993)

	Sotoumi	Uchiura		
1	Inatsuka	From the hana of Tateishi to Jingūshima		
2	Hiraishi	From Jingūshima to <i>Uchiura</i>		
3	Sasa no hana	From the border of Shiritsubohama Nigishima to Ochiyagoroshi		
4	Mā	From Ochiyagoroshi to the sea at the left edge of the mouth of Iguimo		
5	Takeyashiri	From the sea at the left edge of the mouth of Iguimo to the border of the restricted fishing zone, No. 3		
6	Ōhama	//	//	No. 2
7	Shinsukeochi	//	//	No. 1
8	Minowa	From the Kataokake Kana-ami nai to Akoshi Funatsuke		
9	Mutsumiya	From the restricted zone border to Koboenohana		
10	Obera	From Koboenohana to Ugazurokuchi		
11	Sazashiri	From Ugazurokuchi to the Ōtani border		
12	Gamanokuchi	From the Ōtani border to the Kataokake Kana-ami gai		
13	Ohama	From Akoshi Funatsuke to Ōshiki Kana-ami nai		
14	Suno no hama	From Ōshiki Kana-ami gai to the right edge of Jingūshima, No		No. 2
15	Maeboshi	//	//	No. 1
16	Oyanazuro	Agonohama,		No. 3
17	Kamisu 2	//		No. 3
18	Kamisu 1	"		No. 1

## 6 Towards Fishing Areas Exclusive to Hobo

Ten years after the creation of the Hobo Ebiami Kumiai Rules, which include Nigishima, Hobo and Nigishima merged under the Kumano Fisheries Cooperative (*Kumano Gyogyō Kyōdō Kumiai*) in 2001. It was from this period that the relationship between Nigishima and Hobo worsened.

According to documentary archives at the Yukichō office of the Kumano Fisheries Cooperative, there were protests over the "excessive disregard of Nigishima *ebiami* operators toward Hobo *ebiami* vessels in the past" (Hobo Ebiami Kumiai 1994). No agreement could be reached with Nigishima, and the fishermen drew sea boundaries themselves. Essentially, the *Minami*-ban of the *sotoumi* was handed over to Nigishima, while Hobo obtained exclusive rights to the *Higashi*-ban area. In addition, *uchiura* areas were also divided between the two. This arrangement was approved on August 31, 2003, leading to "an agreement regarding the clear division of fishing areas with the Nigishima Ebiami Cooperative" (Hobo Ebiami Kumiai 1994).

In other words, of the *sotoumi* areas shown in table 3, 1-7 were given to Nigishima, while 8-18 were given to Hobo. Of the *uchiura* areas, 1 and 2 went to Nigishima, while 3-18 became fishing areas for Hobo. The divi-

sion was drawn on the sea so as to extend the existing land border. Hobo was in any case in a better position for *ebiami*, with *ebiami* beginning later in Nigishima compared to Hobo. The current fishing areas and pairs of *sotoumi* and *uchiura* areas are shown in table 4 and figure 5.

As shown in table 4, in 2013, the *uchiura* areas are indicated by ranges – 'From X to Y' – while from the following year, they are indicated by specific fishing area names. Some areas indicated by the name of the location are shown in the following year by the name of the fishing area.

Table 4. Pairings of Sotoumi and Uchiura Fishing Areas (October 2003 and October 2004)

Sotoumi	Uchiura (2003)	Uchiura (2004)	
Minowa	The white line from the border of Shiritsubohama Nigishima to Ochiyagoroshi	Shiritsubonohama	
Mutsumiya	From the white line at Ochiyagoroshi to the sea at the left edge of the mouth of Iguimo	Iguimo	
Obera	From the above to the border of the restricted area	Matsukake	
	Restricted fishing area 2	Restricted fishing area 2	
	Restricted fishing area 1	Restricted fishing area 1	
Sazashiri	From the border of Ishiyama to Yamashitake Tsubo-ami Kana-ami	Kobae	
Gamanokuchi	From Yamashitake Kana-ami-gai to the border of Ugazuro	Nayanoshita	
Ohama	From the border of Ugazuro to the border of Ōtani	Senohana	
Sunonohama	From the border of Ōtani to the Kataokake Kana-ami	Ōtani	
Maeboshi	From Akoshijinja Funatsuke to Ōshiki Kana-ami	Nakatonouchi	
Oyanazuro	From Ōshiki Kana-ami-gai to the right edge of Jingūshima	Nakatonosoto	
Miagenoshima right edge	Akonohama 2	Akonohama 2	
Outwards from right edge	Akonohama 1	Akonohama 1	

For example, "From the border between Shiritsubo no Hama to Nigishima to the white line at Ochagoroshi" became "Shitsutsubo no Hama"; "From Ochagoroshi Hakusen to the shallows to the left of the bay mouth" became "Iguimo"; and "From the Ōtani border to the Kataoka-ke Kanaami" became "Ōtani". This shows the possibility of ongoing changes in fishing areas and fishing area names related to changes in the number of *ebiami* participants.

Table 5. Joint fishing activities within the restricted fishing areas in 2013

Date	Total number of <i>ise ebi</i> (lobster) fished by each cheam	Fishing area 1	Fishing area 2	Fishing area 3
October 6	268	108 (A team)	76 (B team)	84 (C team)
October 7	261	117 (B team)	53 (C team)	91 (A team)
October 8	135	54 (C team)	32 (A team)	49 (B team)

Total number of fishermen is 10, A team consists 3, B team consists 4, and C team consists 3. (Hobo Ebiami Kumiai 2013)

As in Tsuga, restricted fishing areas are placed adjacent to the village. However, the restricted areas are opened once every three years, when the weather is unfavourable, and the catches are bad. According to a record of the general meeting of the Small-scale Ebiami Cooperative on September 13, 2015, "Three vessels can operate in the forbidden areas with one three-ply net per person, when fishing is halted due to weather conditions. Shrimp must be distributed among the fishermen, but the fish caught by a fisherman will be the property of that fisherman" (Hobo Ebiami Kumiai 2015). In fact, the restricted area was fished that year for a period of three days from October 6 (see table 5). It can be seen that ten people in the three groups (groups A to C) fished the areas 1 to 3 in turns. From the fact that immature fish are released during the fishing season in the restricted areas suggests that these areas are being cultivated for use during emergencies.

Moreover, currently, due to aging and the declining population of *ebiami* fishers, numbers are not drawn by pairs of households (*niken moyai*); *uchiura* and *sotoumi* areas are allotted to individual fishermen, who place their nets in one or the other on any given day. This practice is unchanged from the past. Other fishermen can enter vacant *uchiura* areas at certain times. This is based not on a geographic indicator, such as the passing of a vessel to the *sotoumi* area around the *Agono Hana*, but it is based on time.

For example, if a vessel is placing nets in an *uchiura* area from 3:00 p.m. to 4:00 p.m., others can place nets in the *sotoumi* area assigned to that vessel after that time. Similarly, if a vessel is placing nets in a *sotoumi* area between 3:30 p.m. and 4 p.m., others may place in that vessel's assigned *uchiura* area after that time. Because it takes vessels departing the

**<sup>4</sup>** Ebiami Kumiai Kirokucho Heisei 25-nen 9-gatsu 12-nichi 2013. This special use of restricted fishing areas can be seen in other examples. The area by the mouth of the river in Kure, Nakatosa-chō, Kōchi Prefecture is a restricted area for *ise ebi*. However, the area is opened to raise funds for the repair of shrines associated with the fishing cooperative, such as Sumiyoshi Shrine or Ebisu-sama.

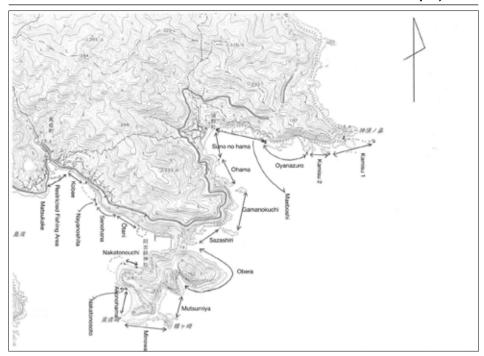


Figure 5. Fishing areas in Hobo

port at Hobo thirty minutes longer to reach *sotoumi* areas compared to *uchiura* areas, the time limit for selecting *sotoumi* fishing areas is thirty minutes longer. At the beginning of spring, as days become longer, *uchiura* nets are placed beginning at 4:00 p.m., while fishing in the *sotoumi* areas begins at 4:30 p.m.

The following conclusions can be drawn from the disputes over fishing areas between Nigishima and Hobo. Though there are differences in the histories of the fisheries in these two places, the relatively large number of participants in the kuji draw (18 people), combined with the large fishing areas, the allotment of rights to two areas at a time, and the free use of assigned but unfished areas were the indirect causes of the dissolution of joint fishing activities between the two villages.

# 7 Shiro uo Fishery in Ōtagawa

Another fishery with a large kuji draw is the shiro uo 白魚 (ice goby) fourarmed scoop net fishery of the Ōtagawa river in Shimosato, Nachikatsuurachō, Wakayama Prefecture. In the past, fish were caught using four-armed

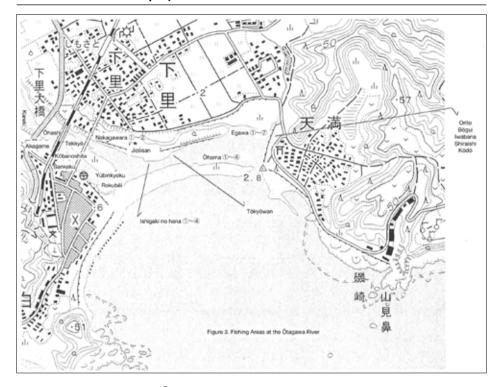


Figure 6. Fishing areas of the Ōtagawa river

scoop nets hung from scaffoldings placed in the river, similarly to the fishery of Hirokawa, Yuasa-chō (also in Wakayama). However, since 1998, the method has changed, and they use nets cast from boats fixed to stumps placed in the river.

The four-armed scoop nets consist of a large external square net measuring 255 cm on each side. At the centre of this net, finer square nets (125 cm per side) which actually catch the fish are sewn together. From the open sea by Kumano, *shiro uo* ascend the  $\bar{O}$ tagawa river. These nets are hung from the boats. The fishers net the fish by pulling the nets up when the fish pass over them.

The fishing season extends from approximately January 10 until the middle of April. The season reaches its peak when the mountain cherry trees bloom, and is marked by the full blossoming of the Somei-Yoshino trees at the mouth of the river. The sign of the end of the fishing season is said to be the blossoming of the pear trees.

The *shiro uo* fishing area covers approximately 1 km of the river, from its mouth up to the Shimosato  $\bar{O}$ hashi bridge. It is a narrow section, where the river is only 150 metres wide. In contrast, the number of fishers numbered



Figure 7. The *kuji* boxes of the Shimosato *shiro uo* Fishing Cooperative

up to 40, at times leaving only a boat's length between them. Today, there are only 2 or 3 active fishermen, so no kuji draw takes place, but when the number was greater, fishing points had to be assigned by kuji. The days fishing was to take place, areas were assigned by kuji draws; however, the numbers drawn did not have any special correspondence with particular fishing areas. Instead, the draw determined the order in which fishermen would be allowed to select their preferred area. The person who drew number 1 would have first selection of an area, which they would fish for that day (see fig. 6).

The "Shimosato *shiro uo* Fishing Cooperative" was established in 1985, and managed the fishing areas from the river's mouth to the Shimosato Ōhashi bridge. The cooperative currently possesses two *kuji* boxes, the *zakuji* 座籤 and *honkuji* 本籤 (fig. 7) These boxes are made from sections of tortoise-shell bamboo carved into a hexagonal shape. The *zakuji* is 25 cm high, and 9 cm on each side. The *honkuji* is 27 cm high and 12 cm on a side. The *kuji* themselves are also made of bamboo. Each is a rod sharpened on one end and painted black. The other end carries a kanji numeral written in ink.

The draw takes place before fishing begins each day. Any fishermen arriving more than five minutes late is assigned the last spot. The kuji method used at Shimosato has some special characteristics. First, the fishermen form a circle, and each person takes a turn shaking the hexagonal boxes. Afterwards, the people who drew the last two positions (the two largest numbers) from the zakuji during the previous lottery are left standing next to each other in the circle. They each draw a number from the zakuji and compare them. The box is then passed to the person adjacent to the fisherman who drew the smaller number, and the box goes around the circle with each person drawing a number. The honkuji draw, which takes place after the zakuji, begins similarly, with the two who drew the largest numbers in the previous honkuji standing next to each other. On occasion, a person may draw the largest number for two days in a row. When this special case occurs, that person is allowed to draw from the honkuji first on the third day.<sup>5</sup> Without the complex method described above, the equal distribution of fishing opportunities may not be possible.

The previous pages have only described several examples of *kuji* draws in the fisheries on the eastern coast of the Kii peninsula. These fisheries use few tools, meaning that they require fishermen to rely on techniques developed over many years. Insofar as the fishing areas are near the coast, and are typical of small coastal fisheries, the barriers to participation are low. Consequently, accessibility to fishing areas is constrained. As a result, the selection of fishing areas by *kuji* draw has maintained equality among the fishermen.

Moving away from the Kii peninsula, there is another fishery that employs a *kuji* draw due to the ease of access and resulting constraints on fishing areas: the *tataki ami* fishery of Koi on the Mikata-kō Lake in Fukui Prefecture.

# 8 The tataki ami fishery of Mikatakō Lake

Mikata-kō lake is the furthest inland of the five Mikata-go-kō lakes facing Wakasa-wan Bay in Fukui Prefecture. The *tataki ami* fisher of Koi takes place today, as discussed in my previous publications (Kawashima 2011, 249-54). The fishing season here is roughly four months from November 23 until mid-March of the following year. However, because of daily changes in the weather, boats leave port on only about one-third of the days during the fishing season.

When fishing begins, boats depart the banks of Hasugawa river for the lake, and gather at one location on the shore. The order in which these

 $<sup>{\</sup>bf 5}~$  As described on March 7, 2016 by Osamu Shimoji (born 1941) of Shimosato, Nachi Katsuura-chō, Wakayama Prefecture.

small vessels, known as *sanpa*, will position themselves in the fishing area is determined by a draw. All fishermen participate in a morning discussion to determine which fishing areas will be selected. The vessels that have arrived at the fishing area spread their nets from the shore out into the lake, beginning with the boat that drew number 1. The draw employs numbered cards, handed by the head of the cooperative to one of his colleagues. The colleague shuffles them face down like playing cards, after which the head of the cooperative calls the name of each participating fisherman. For each name, the colleague reveals the number of the card on top of the deck.

The nets used are each 17 or 18 metres long, and 1 metre high. Fishermen unfold four nets, totalling 280 metres in length. The lake itself is only approximately two metres deep, making these nets sufficient. When the nets are placed, their positions are marked by small yellow buoys at the beginning and end of each net, as well as the centre (two nets in). Only about 10 metres separate the boats from each other. The fishermen stand on their boats and place their nets in the lake. After all of the nets are in the water, the boats carefully accelerate in the opposite direction, and the fishermen strike the surface of the water with green bamboo rods 4 to 5 metres in length, from the port side. Paying attention to the net of the boat to their starboard, each fisherman strikes the water with their rod several times. The area around the boat that can be struck is called the boat's *mae*.

Once their boat has returned to the beginning of the net, the fisherman will sit and carefully raise the net. *Koi* caught in the net are skilfully scooped up in a landing net, and are placed in the boat's *kame* or holding tank. This process is repeated. Each round is called a *kachi*. Thus, in the past, the fishery was not called *tataki ami* but *kachi ami*.

At their most numerous, 40 vessels would work on Mikata- $k\bar{o}$  lake, but since the mid-1950s, people left the fishery to pursue other wage labor. In 2008, only seven vessels were operating.<sup>6</sup>

In this fishery, nets are not often laid straight. This has long been an issue in *tataki ami*. Each fisherman tries to make the *mae* area, which they strike, as large as possible, meaning that it always slightly expands. In this *tataki ami*, each fisherman's portion is determined by their individual catch.

However, the reason that they work cooperatively and draw *kuji* to determine the order that they line up is that the chances of a good catch would be lower if they each were doing *tataki ami* individually. Conversely, if the total catch were distributed evenly among the vessels, then individual fishermen would have little incentive to fish seriously, making the fishery itself something of a pastime, and reducing the amount of the catch. Fish can be caught because the fishery is both collectively operated and also relies on the skills of individual fishermen. Such a dilemma has been

a part of *tataki ami* since it began. There is the same dilemma faced by the *ebiami* in Hobo, mentioned above.

The next section will describe cases of larger scale coastal fisheries employing kuji on the Izu peninsula and the Izu islands, the Oga peninsula, and the Shimokita peninsula.

## 9 Tairyō kuji and Bonten kuji of Izu Iwachi

Iwachi, in Izu Hamamatsu-chō of Shizuoka Prefecture, is a settlement where the *bora*, or flathead grey mullet, was fished with blanket nets, as described in the second volume of *Shizuoka-ken Suisan-shi* (1894): "In the western areas of the Izu region, *bora* is fished in the spring only at Iwashinamura Iwachi". Saitō Iseuemon, when writing about the festivals of Moroison Shrine in his *Kyōdo ni ikita haichijūnen*, writes the following:

The festival of the 28th day of the 2nd month is called *Ura Matsuri*. It is where many decisions about the fisheries were made.

Through a *kuji* draw, the first and second vessels of the land (*riku*), and the first and second vessels of the sea (*oki*) to begin fishing were determined for *bora* blanket netting, as were the four western sections for troll nettings, with the first section as the beach.

In addition, the captain of the fishing vessel which would carry the  $tairy\bar{o}$  大漁 (plentiful catches) flag of the Bonten maru, a religious ornament, was also determined by lottery. The vessel that receives this flag will have safety on the sea and a plentiful catch. In addition, there is a practice of divining three  $tairy\bar{o}$ -bi (days of plentiful catches), which were divined by drawing the kamikuji for katsuo fishing during the summer. On these days, fishermen work more aggressively to increase their catches. (Saito Iseuemon s.d., 6; Author's translation)

The kuji mentioned here is of a slightly different kind than the other examples discussed above. First, this kuji takes place as part of a festival of the settlement's shrine. Second, the lottery does not determine the fishing areas allotted to fishermen, but the role each vessel plays in the bora ami, the order in which the troll nets are brought up on the beach, and even the divination of good fishing days in the katsuo fishery. Most important, however, is that the lottery determines who will be designated the Bonten maru 梵天丸, which will have the right to carry the Bonten maru flag – a banner roughly five metres long – for the year, and consequently who will have special rights to good areas in several different fisheries.

Blanket and troll net fishing of *bora* and pole fishing of *katsuo* have disappeared from Iwachi, and the remaining fisheries are focused on the coast. However, the Bonten *Kuji* 梵天籤 for selecting the *Bonten-maru*, and



Figure 8. The *kuji* box of Iwachi (October 22, 2016)

the *tairyō Kuji* to divine the three best fishing days of the season, still take place today. Festivals take place at the shrine on February 28 and October 28, but the *kuji* draws are held only in February, during the Bonten *Matsuri* 梵天祭り festival.

At the beginning of the lottery, the ten people who will be drawing lots and ujiko – constitutents of the shrine carrying offerings and shinshu (wine) on a sanpo platform – pass between two banners bearing the name 'Moroiso Shrine' standing on the beach. This is called the hama kudari AFI. Next, the  $tairy\bar{o}$  kuji draw begins at the hall of worship. The chief priest shakes the kuji box, removes three kuji, and gives them to the chief representative of the shrine. This representative reads out the months and days written on the three kuji. These are the days of the coming season which are blessed with plentiful catches. The fishermen of Iwachi remember these days, and continue to believe in them today.

The Bonten *kuji* then follows. This draw consists of the *junban kuji* 順番籤 and the main *hon kuji* 本籤. For both draws, a fisherman takes one *kuji*, in this case a *koyori* 紙縒り (a string of twisted paper), from among those atop the *sanpo* held by the chief priest. The lots of the *junban kuji* carry numbers. In the *hon kuji*, only one of the lots is marked with a circle symbol. It is the duty of the chief representative of the shrine to make

these *koyori* from folded pieces of paper. In the past, they were made by the  $\bar{o}ya$  of Iwachi (the owner of the ship in the main household of Iwachi). The Bonten *maru* determined by this draw receives the right to raise the *Bonten Maru* banner from that day.

In the past, the Bonten kuji was drawn by the captain of a boat involved in katsuo pole fishing. This is because around the late 1950s, there were five vessels fishing katsuo. Today, representatives from five cooperatives – the ebiami Cooperative, the small vessel cooperative, the  $\bar{o}ami$  (large net) cooperative,  $kibinago \neq \forall \forall \exists$  (silver stripe round herring) cooperative, and the dragnet fishing cooperative – draw the kuji.

The  $tairy\bar{o}\ kuji$  box was formerly kept by the  $\bar{o}ya$ , but it is now stored at Iwachi's assembly hall. The box is rectangular, measuring 30.5 cm by 3 cm. The bamboo rods used as kuji are marked with all of the days from April to August (fig. 8). These dates correspond to the katsuo pole fishing season. The writing on the front face of the box says "Offering of the kuji Box", while on the rear, in ink, it is written: "28th day of the 10th month of the year Shōwa 29, Shizuoka-ken, Kamo-gun, Iwashina-mura, Iwachi. Written by Saitō Saburō"."

## 10 The kuji matsuri Festival of Kōzushima

The Monoiminanomikoto Shrine is located in Kōzushima, one of the seven Izu Shichitō islands. Every year, on January 14, a festival called the kuji Matsuri 籤祭, in which kuji are drawn to assign fishing areas, is still held. Today, only the form of the ritual remains, but in the past, the festival was where the fishing areas for the kincha, or drive fishing of takabe (yellowstriped butterfish) and tsaki (striped pigfish) were selected.

The word *kincha* possibly derives from the word *kinchaku ami*" 巾着 (purse seine), but despite the similarity of the words, the fishing method and net structure are quite different. The fishery uses bulk nets (*tatekiri ami* 建切網) and blanket nets. This is because the waters around Kōzushima are said to be too shallow to draw the bottom of nets shut.

A detailed description of *kincha* is provided in *oikomi ryō* (Kawashima 2008, 257-66), and so it will not be repeated here, but briefly, it involves two vessels using a *honkake ami* 本掛網 (bulk net) which move from the direction of the tide to encircle the fish. *Kincha* is based on a traditional method called *sumoguri* 素潜り, and has been influenced by the drive fishing methods of Okinawa. In other words, it is a fishing method of southern areas that takes advantage of the *kuroshio* 黒潮 current.

A letter dating from 1865 (Meiji 28)<sup>8</sup> requesting permission to fish using *kincha* submitted by four island residents to the island's administrative office still exists, showing that this is the period in which *kincha* began. *Kincha* is also said to be a refined version of the *makase ami* まかせ網, but the *makase ami* relies on the tide to net the fish, and it therefore requires a careful reading of the tides.

The kincha was initially organized under the funamoto 船元制度 (Funamoto system), in which the funamoto 船元, the senior household and the owner of the fishing vessel, employed members of several funago 船子 households, or who worked on that vessel. However, at the end of the Meiji period, the younger members of the funago households who were excluded from this system of hereditary succession, began to resist. As a result, the ami gumi 網組, a cooperative association, was born, and eight ami groups were established. The ami gumi was centered on the yado 宿 (the buildings that housed young people), as the yado system had been an important support for the fishery. However, as differences in the catches among the eight ami emerged, less successful groups disappeared. Two groups dissolved in 1935 (Shōwa 10), while an additional group ended in 1940 (Shōwa 15). Two more groups disappeared in 1961 (Shōwa 36), leaving three groups remaining.

Around 1965 (Shōwa 40), the area of Zenisu began to be exploited for fishing by Kōzushima, which is four to five hours away by hot-bulb engine boat. It was formerly a place rich in *takabe* and *mejina* (smallscale blackfish), but today Zenisu is surrounded by recreational boats, making *kincha* impossible. The discovery of Zenisu became an opportunity for the three remaining groups to work jointly, resulting in the effective disappearance of the *Ami* cooperatives.

<sup>8</sup> Suzuki Tōjirō and other four residents made a letter to officer of Kōzushima requesting permission from the office to fish with nets within the coastal fishing ground. This letter is in the possession of Kōzushima fishery cooperative.

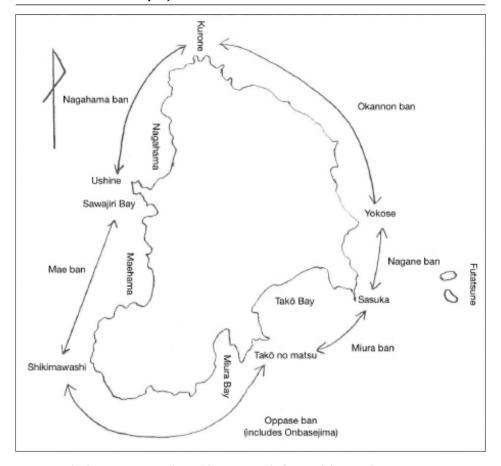


Figure 9. Ada divisions at Kōzushima (during period of 6 equal divisions)

the fishing areas rotate each day in a counterclockwise direction around Kōzushima. These fishing areas are called  $ada \ \mathcal{PF}$ , and the right to fish is called  $ada \ no \ ban \ ken$  (the right to an ada number). This is a right that can be used from the day of the Kuji Festival. In the past when there were eight groups, fishing areas were divided into eight equal areas around the coast. This was also the case for kincha.

When Kichirō Maeda 吉郎, 前田 (born in 1921) was active, there were six groups, named Matsumori *gumi* 松盛組, Matsunan *gumi* 松南組, Ishika *gumi* 石嘉組, Seigen *gumi* 清源組, Seishō *gumi* 清庄組, and Heishichi *gumi* 平七組. Most of these names are derived from the first character of the family name and the first letter of the *yagō* 屋号 (house name – also the name

of the first generation), which have been shortened from Matsue Sakari 松江盛, Matsumoto Mambei 松本南兵, Ishida Kaemon 石田嘉衛門, Shimizu Genpachi 清水源八, Shimizu Shōsuke 清水庄助, and Shimizu Shichihei 清水平七. These six groups divide the seas around Kōzushima into six areas - Oppase ban オッパセ (恩馳) 番, Mae ban 前番, Nagahama ban 長浜番, Okannon ban 御観音番, Nagane ban 長根番, and Miura ban 三浦番 - rotating among them each day.

In the *kuji* draw, *Oppase ban* corresponds to number 1. Oppase shima island is an important fishing area, which is also known as *Shima no Kura* 島の蔵. Its *ada* ranges from Tako no matsu to Tōdai shita (*Shikimawashi*) to account for days with strong winds when the island may not be accessible. The *Mae ban* is from Shikimawashi to Sawajiri Bay, while *Nagahama ban* is from Ushine to Kurone. *Okannon ban* reaches from Kurone to Yokose, *Nagane ban* from Yokose to Sasuka, and *Miura ban* from Sasuka back to Tako no matsu (fig. 9). For these areas, the draw does not simply divide the coast into six equal parts; the effect of sea conditions on potential catches is also taken into account. Fishermen rotate among these areas each day, and the first ban is considered to be the luckiest, although the conditions of any given area may differ from year to year.

The right to fish an area begins on the day of the lottery, and each group has the exclusive right to fish their area from dawn until dusk. In some cases, the violation of this rule resulted in the confiscation of the violator's catch. In the *kincha*, there had to be at least two vessels fishing for the right to the area to be recognized. In some cases, fishermen would be criticized for "not using their area".

In Itoman, Okinawa, where drive fishing employed a 'round up' method, fishermen were forced to move around to other places for work, but on Kōzushima, the custom of Ada helped to manage the use of fishing areas. When the surrounding seas are used as a single shared fishing area, competition among fishing groups intensifies resulting in the decline of stocks. For this reason, ada were specified for the fishing groups, and were rotated among them each day, beginning in 1901 or 1902 (Meiji 34 or 35). The determinations of ada by kuji draws were carried out under the name of the gods, to which nobody could object. This shows the important role played by the gods in the fishing villages.

 $<sup>{</sup>f 9}$  As described on September 11, 2006 by Kichirō Maeda (born in 1921) of Kōzushimamura, Tokyo.



Figure 10. *Hatahata* cut from a bundle of paper money

## 11 The Hatahata Festival of Oga

At a shrine on the Oga Peninsula of Akita Prefecture, a kuji draw is held in a ceremony to divine the catch at the beginning of the  $hatahata / \sqrt{9} / \sqrt{9}$  [ sim [Sim ]] (sandfish) fishery. The Oga Peninsula, which extends out into the Sea of Japan, is broadly divided into the Kitaiso and Minamiiso regions. In the Kitaiso region, the ceremony is held at Shinzan Shrine, while in Minamiiso, it takes place at Satake Shrine.

The *kuji* at Shinzan Shrine is used to select five days: the first day of the *hatahata* season, and four days of good catches in the fishing season. The fishing season is approximately one month long, from December 1 to 25. In the past, the *kuji* took place on the festival days of the shrines associated with each village. Thus, in Kitaura on the festival day of Kitaura Shrine of November 14, 3 representatives of the 15 lineages involved in *hatahata ami* participated in the lottery. In Aikawa, which has six lineages in the *hatahata* ami, a draw took place on the festival day of Uga Shrine on November 17. In Kitaura and Aikawa, fishing areas are given out first to the earliest groups. The draw is used to determine fishing areas by the fishing cooperative only for the first day. At each of Nomura and Yunojiri, there are three lineages in the *hatahata ami*.



Figure 11. Omikuji no gi at Satake Shrine (November 9, 2016)

The *hatahata* fishery is a dangerous one, because the catches are greatest in stormy conditions. In the past, accidents on the sea were frequent. In the mid-1950s, fishermen asked for those lost at sea to be memorialized, and to pray for safety and plentiful catches. This was the beginning of the current *hatahata* Festival of Shinzan Shrine.

However, during the early modern era, during a period of Buddhist-Shinto syncretism for Shinzan Shrine and Kōbōji Temple, an event called the *Hatahata Matsuri* 鰰祭り was held by the temple on the first day of the 10th month of the lunar calendar. According to the *Rokugun Saijiki*:

When the people of the fishing households of each village bring many small stones, the priest of the temple writes one character of the  $K\bar{o}my\bar{o}$  Shingon<sup>10</sup> on each stone. The stones are placed before the altar and prayers are offered. The fishermen take these stones home, mix them with five types of grain (gomoku), and scatter them in the waters of their fishing area. This is an offering to wish for success in fishing, but is also to mourn the spirits of many tens of thousands of fish. (Rokugun Saijiki 1929, 453)

It was a festival in which not only those lost at sea but also fish such as the *hatahata* were memorialized. This festival was revived in the mid-1950s. <sup>11</sup> In the current *Hatahata Matsuri*, nearly all of the fishermen of the Kitaiso region gather at the shrine before fishing, when the head priest of Shinzan Shrine performs the draw to divine the first day of the season and the four days of rich catches. At the end of the ceremony during the *Naorai*, when the participants eat and drink the offerings, *hatahata* is also eaten. There is a saying that one fish eaten will become thousands of fish [caught].

Three kuji are then drawn by the chief priest. The priest then hooks koyori laid out on a sanpō platform using a bundle of paper money. This is the same as the kuji draw of Shinzan Shrine in Kitaiso. The shape of the bundle of money is meant to resemble the hatahata (fig. 10). The first draw divines the ryōbi, or the day on which the fish will approach. In Funagawa, the fishing season is from the first of December until the 7th of January, but the kuji themselves show only a number to indicate the days up to and including December 31, while the seven days of the season in January are indicated simply by the month, Ichigatsu 一月 (January). Seven ryōbi days are selected from these 38 kuji. After this, the umi ku draw is held, which determines the first fishing area to be used that season. Nine locations are written on koyori: (from the most distant to the nearest): Oki no oki, oki no naka, oki no oka, naka no oki, naka no naka, naka no oka, oka no oki, oka no naka and oka no oka. These locations are not precisely defined. Three kuji or locations are drawn from among these nine. Finally, the Ryō no Kikkyō is drawn to determine the fortune of the fishery: (from the best to the worst) Tai-tai-ryō, tai-ryō, chū-ryō, shō-ryō, and mu. Tai-tai-ryō and mu are represented by a single blank paper, to make a total of four kuji. This paper is called the shiro fuda. When the shiro fuda is drawn, it is the chief priest who decides whether it signifies tai-tai-ryō or mu.

Every year, on the day of the *kuji* draw, four or five executives representing the approximately 20 members of the *Gyogyō Dōshi Kai* (the fishermen's association) for *hatahata* observe the draw, and note the results

<sup>11</sup> On the simultaneous commemoration of fish and people lost at sea, see Kawashima 2013, 235-56.



Figure 12. Five fishing grounds more prominent were chose.  $Uroko \ [\Delta]$  and  $Ichiyamajyo \ [\Xi]$  are the markes of the houses on duty

before departing (fig. 11). It is said that the *ryōbi* days divined in this way are accurate about 80% of the time. Today, the *naorai* is omitted, but the name of the *kuji* is written as *okami kuchi*, to invoke the meaning of 'oracle' through its similar pronunciation.

### 12 The batori of Shimokita

The *tara* (cod) fishery of Wakinosawa-mura (current Mutsu-shi) in Aomori Prefecture, peaked in 1989, involving up to 125 vessels placing some five hundred nets. Today, only 24 vessels remain active fishing 70 to 80 locations, as the number of fishermen and fish has decreased sharply. It is thought that the increase in scallop farming has blocked the seasonal migration of *tara*.

Nevertheless, the custom of *batori* at the beginning of the *tara* season continues to this day. *batori* is a set of strict rules that maintain the equality of fishing opportunities among fisherman in a shared fishing area. The *tara* fishing season begins at the beginning of December. The custom is for 24 *tara* fishing boats to depart in a convoy from the coastal *oka* area to the *oki*, or open waters. After lining up, a signal is given to open fishing, and each boat can freely head to the areas that they expect to be on the *taras'* route to place their nets.

Only four *tara* nets can be loaded each day, three of which are placed. But from the following day, boats are free to move where they wish. There are no *tara* boats in the main village of Wakinosawa, but in the West, a total of 23 vessels take part in the *batori*: four vessels in Seno, three in Araida,



Figure 13. The *Tairyō Kuji* at the Kure Fish Market in Nakatosa-chō (October 14, 2011)

seven in Kinami, three in Takoda, and six in Kusodomari. If the Shimokita peninsula is compared to an axe, then the point where the axe first touches the log corresponds to the location of Kusodomari.

In the past, the *batori* days differed between Wakinosawa and Kusodomari. In Kusodomari *batori* took place on November 24, while in Wakinosawa later in the year, holding it on December 1. On the day of the *batori*, people from one village went to help their friends and relatives in the other.

Moreover, the manner in which the *batori* was conducted used to differ between Wakinosawa and Kusodomari. In Kusodomari, the dropping of an anchor was enough to receive the right to a fishing area, while in Wakinosawa nets had to be loaded into a boat and placed. This difference remains today. In order to place one net, an area of approximately 500 square metres is needed.

In Kusodomari, fishermen of the village gather at the Ikishima Shrine on the auspicious *Taian* day, which occurs in the tenth day before the *batori*, and they participate in a *kuji* divination called *Omikiage*. The *kuji* is used to divine the location of that year's migration route, the success of the catch, and the wind conditions during the season. The *betto* (head) of the shrine waves *gohei* paper streamers, then he reads aloud what is written on the catched *koyori*.

The  $gyod\bar{o}$  or path of the fish is a favourable place to lay tara nets. In Wakinosawa, the sea sections where tara nets are placed are divided along the axes of Oka, Naka, and Oki, and Ue, Naka, and Shita (from south to north), defining nine areas. Five are selected from these areas and their names written on paper, which are each posted near the kamidana (household shrine) in each home (fig. 12).

At the *batori*, these oracles are consulted, but each fisherman has their own store of experience and knows the routes of the *tara* well. Today, these oracles do not influence the fishermen very much. In addition, because this divination is performed at the shrines in each of the five villages, their results also differ. However, the form in which this kind of fortune telling is written, (*omikuji* – as 御神口, also pronounced *omikuji*), is the same at Satake Shrine in Oga. This indicates that in the past this was an oracle given through a person possessed by a god.

Kushibiki Risaburō of Kusodomari (born in 1929) has been a part of the *tara* fishery for many years. In the past, some 25,600 *tara* were caught during the more successful seasons, with small vessels catching even more than 5,000. Fishermen would make 5 million yen in just one *tara* season. Mr. Kushibiki remarks that "a person could live quietly for three years by fishing *tara* for just one".

On the day before the *batori*, a rice cake with red bean jam known as *batori mochi* 場取り餅 would be made in the houses of *tara* fishermen and distributed among family and relatives in hopes of receiving a good fishing area. During the winter months when the weather is changeable, the fishermen of Kusodomari would judge that day's weather early in the morning, and decide whether the *batori* would take place or not. This is because the start line is in the area of the Hokkai cape near Kusodomari. The order in which boats line up on the start line is not predetermined, but boats are penalized as *ihan sen* 違反船 if they begin moving before the signal to depart is given.

The first violating boat must bring 1 to (18 liters) of sake to the financial statement report meeting in May, while the second and third violating boats must bring 5 sho (9 liters) and 3 sho (5.4 liters), respectively. This suggests that in the past there were boats that started early in spite of the penalty.

#### 13 Conclusion

The previous chapters have described examples of 'fishing with *kuji*' in several places across Japan. The level of detail given has varied among the examples, but a sufficient overview has been presented.

The fact that these kuji derive from Shintō kuji rituals can be understood from the rituals described in the latter part of this paper. The initial motivation for these kuji draws may have been to pray at the beginning of the fishing season for a good catch, and to consult the oracle of the gods

<sup>12</sup> As described on December 9, 2008 by Risaburō Kushibiki (born in 1929) of Kusodomari, Wakinosawa-mura, Mutsu-shi, Aomori Prefecture.

to discern the best days and locations to fish. This is evident from the use of the kanji 御神口 to depict the word *omikuji* 御神籤 (fortune, lottery). The *Hama kudari* of Iwachi in Izu, and the *Shiogori* ritual performed prior to the draw in Kōzushima similarly show the practice to be a Shintō one.

However, the Iwachi *kuji* indicates that, in addition to the divination of days of good fishing, *kuji* draws can also be used to maintain the spatial equality of access to opportunities for fishing in coastal fisheries, because it specifies positions to place *bora ami* or draw troll nets. In contrast, the ambiguous expression '*tairyō* suru hi' 大漁する日 (days of plentiful catches) used in the *katsuo* fishery *kuji* draw is motivated by the fact that this fishery takes place in large areas on the open sea.

This spatial equality of access eventually was separated from Shintō ritual, and became used to determine each individual's fishing area before the start of the fishing season. The examples from the Izu peninsula presented in the first half of this paper are exemplars of this. Moreover, equal access to fishing opportunities can also be distributed across time; that is the case when fishing areas are rotated daily. This produced complex practices in each place, that in some cases have been codified in regulations.

The fairness of *kuji* draws themselves was also refined. In general, this has been achieved through the *za kuji* which determines the order in which the *kuji* will be subsequently drawn. However, in other cases there are customs that seek to ensure the fairness of the draw, as in the *Shiro uo* lottery case of Ōdagawa.

Whether in group fishing or individual fishing, the diversity of how fishing areas are determined can be regarded through *kuji* draws.

The pursuit of fairness through kuji is not just related to coastal fisheries and farm fishing, but it may be found in many fisheries. For instance, in the port of Kure in Nakatosa-chō in Kōchi Prefecture, the order in which boats unload their catches to market is determined by kuji, and is called  $tair\bar{o}\ kuji$ . The boats are actually all unloaded simultaneously, meaning that the kuji does not aim to reduce confusion at the market. However, the first boat to unload will always end up selling its fish at a lower price at auction, because its catch cannot be compared with others. The person who draws the first position can place part of their catch up for auction first, but is also given the right to another spot in the auction order. For example, a boat with a catch of 10 tons may divide it into two five-ton amounts, and put them up for auction separately. This method is also used for pole-fished katsuo at the ports of Kesennuma in Miyagi Prefecture, and Katsuura in Chiba Prefecture. It is said that when there are many boats unloading at the port, the fourth and fifth boats receive the best prices, while others sell

for cheaper.<sup>13</sup> The box used for the  $Tairy\bar{o}$  Kuji at the fish market in Kure is a hollowed-out section of bamboo 27 cm long with a diameter of 7.5 cm (fig. 13). The kuji themselves are lacquered chopsticks whose heads have been sanded, and numbers written on. At Setoura in Ashibe-chō, the lottery is called Ebisu Mukae 蛭子迎え; it requires that a junior fisherman whose parents are both healthy and whose home has not met impurity over the past year draws the ban kuji 番籤 and  $t\bar{o}$  kuji 当籤. The two people who are thus selected must skin dive into the sea and raise a divine stone by the time of ushimitsudoki (2:00-2:30 a.m.) at night.

The worlds that become visible through the custom of *kuji* in coastal fisheries not only show the characteristics of fishery in different places, but, behind the function of ensuring fairness, they reveal the difficult conditions of fishery, in which people are at the mercy of nature.

## **Bibliography**

Hobo Ebiami Kumiai (2013). *Ebiami Kumiai Kirokucho Heisei 25-nen 9-gatsu 12-nichi* 「海老網組合記録帳 平成25年9月12日~」(The record Notes of the Ebiami Association, September 12, *Heisei* 25).

Hobo Ebiami Kumiai (2015). *Ebiami Kumiai Kirokucho Heisei 25-nen 9-gatsu 13-nichi* 「海老網組合記録帳 平成25年9月13日~」 (The record Notes of the Ebiami Association, September 13, *Heisei* 27).

Hobo Ebiami Kumiai (1991). Hobo Ebiami Kumiai Kiyaku 「甫母海老網組合規約」(Hobo Ebiami Association Rules). Ebiami Kumiai Kiyaku oyobi Sonota nigishima tono Gyojyō Kaiiki Senbiki ni Itatta Keii「海老網組合規約及びその他二木島との漁場海域線引きに至った経緯」(An Account of the Writing of the Ebiami Kumiai Kiyaku and the Creation of the Border Line of Fishery Ground between Hobo and Nigishima) (1994). Archival document of the Yugiura branch office of the Kumano Fisheries Cooperative Association.

Hobo Ebiami Kumiai (1994). Ebiami Kumiai Kiyaku oyobi Sonota nigishima tono Gyojyō Kaiiki Senbiki ni Itatta Keii 「海老網組合規約及びその他 二木島との漁場海域線引きに至った経緯」(An Account of the Writing of the Ebiami Kumiai Kiyaku and the Creation of the Border line of Fishery Ground between Hobo and Nigishima). Archival document of the Yugiura branch office of the Kumano Fisheries Cooperative Association.

Kawashima, Shūichi (2008). *Oi komi ryō* 『追込漁』 (Drive Fishing). Tōkyō: Hōsei Daigaku Shuppan Kyoku.

13 As described on October 14, 2016 by Yasuyoshi Aoi (born 1946) of Kure, Nakatosa-chō, Kōchi Prefecture.

- Kawashima, Shūichi (2011). Sakana wo karu minzoku 『魚を狩る民俗』 (The People Who Hunt Fish). Tōkyō: Minei Shoten.
- Kawashima, Shūichi (2013). "Sakana to Kainan-sha wo matsuru koto" 「魚と海難者を祀ること」(To Enshrine Fish and the People Lost at Sea). *Rekishi Minzoku Shiryō Kenkyū* 『歴史民俗資料学研究』 (History and Folk Culture Studies), 18, 235-56.
- Kogata ebiami kumiai (2015). *Sōkai Gijiroku* 「総会議事録」(The record of the general meeting).
- Rokugun Saijiki 「六郡歳時記」(Compendiums of Season Words of Six Counties) (1929). Akita Sōsho Kankōkai (ed.), Akita Sōsho 『秋田叢書』 (Akita Classics), vol. 3. Akita: Akita Sōsho Kankokai.
- Saito Iseuemon (s.d.). Kyōdo ni ikita hachijyūnen. Private press.
- Shizuoka-ken Gyogyō Kumiai Torishimarijo 静 岡県漁業組合取締所 (Shizuoka Prefectural Fisheries Cooperative Enforcement Office) (ed.) (1894). Shizuoka-ken Suisan-shi 『静岡県水産誌』 (Record of the Shizuoka Prefecture Fisheries). Shizuoka: Shizuoka-ken Gyogyō Kumiai Torishimarijo.

### Small-scale Fisheries in Japan

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

# The Endurance and the Transformation of the Traditional Boats Race On the Powers of Shaping the Folk Festival

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**Abstract** Now Japanese fishery and fishing villages are confronted with a difficult situation, for example, the erosion of fishing population, aging and etc. For this reason, Japanese fishery and fishing villages are asked for multilateral functions rather than only fishery production to survive themselves. In these social context, how fishing villagers do practice the folk festival in Japan? Firstly this article, giving a traditional event of boat race in a fishing village in south western Japan, clarifies the endurance and the transformation of it. Secondly, considering the causes and the conditions, this research sheds light on the significance of the practices between fishermen and the public, and on the problems of the powers between the fishing village and the government. Finally, it discusses the framework of research to be able to capture contemporary Japanese small scale fishery.

**Summary** 1 Introduction. – 1.1 Identification of the Problem and the Purpose of this Paper. – 1.2 An Overview of the Field. – 1.3 The Oshikuragō of Today (2015). – 2 The Linkages of the Oshikuragō and the Fishery. – 2.1 The Oshikuragō. – 2.2 The Folkloric Characteristics of the Oshikuragō. – 2.3 The Linkage of the Oshikuragō and the Fishery. – 2.4 The Transformation of the Oshikuragō. – 3 The Irreversible Change and Adaptation of Oshikuragō. – 3.1 Becoming a Large-Scale Festival Under the Government. – 3.2 Gear Improvement and Sharing Rules. – 3.3 Open Recruitment of the Public and the Wasen Daikyōsō. – 3.4 The Diversification of the Oshikuragō: Promotion from the Wasen Daikyōsō to the Oshikuragō. – 4 The Conditions for the Big Japanese Boat Race of Hagi Oshikuragō. – 4.1 The Dual Nature of the Tamaeura Youth Group. – 4.2 The Conditions of the Oshikuragō. – 4.3 The Fishery Community Supporting the Big Japanese Race of Hagi Oshikuragō Behind the Scenes. – 5 Conclusion: the Power to Shape the Interpretation of the Folk Festival. – 5.1 The Meaning of the Regional Folk Festival for the Government. – 5.2 Conclusions.

**Keywords** Folk event. Multilateral function. Public participation. Practice. Invisibilisation of difference. Power.

#### 1 Introduction

## 1.1 Identification of the Problem and the Purpose of this Paper

In the present day, cultural resources are given importance on a worldwide scale. This trend is also unexceptional in Japan, where it has become closely related to the culture of the sea. For example, the importance of "the multiple functions of the fishery and the fishing community" is recognized by the *Fishery Basic Act* of 2001, which led to the promotion of related businesses by various public offices. Under these conditions, there is an increased need to present and understand the cultural activities of fishing communities. Because research on this topic from a sociocultural point of view has been insufficient, problematic understandings of fishing communities and small-scale fisheries persist.

The preservation of traditional fishing cultures preceded the emergence of current policies. Many diverse policies and business activities concerned with promoting fishing communities and tourism have been implemented recently. However, these policies are enacted independently by different levels of government – national, prefectural, and local (cities and villages) – and thus they do not necessarily interact in a structured or historically consistent way (Yasumuro 2005). For this reason, in order to understand small-scale fisheries, it is necessary to untangle the concerns of different levels of government that have developed in complicated ways.

We need to attend to the fact that the relations between governments policies and everyday life in these communities and their folk cultures are not necessarily in harmony (Adachi 2010). These relations cannot be reduced to a dichotomous framework, which underlies much recent scholarship (Ōta 1993), but must be apprehended from a multidimensional perspective. Furthermore, in some conditions the relations between these sides can be in tension, sometimes damaging regional everyday forms of life (Ueta 2007; Kogure 2015; cf. Martinez 2004). Therefore, we not only have to carefully understand what occurs in these multiple relations, but also to clarify the contemporary characteristics and conditions that support them.

From this standpoint, this paper focuses on a folk festival of a fishing community. Focusing on this enlarged festival, I examine here the following three points using an anthropological approach. The first is the relationship between the fishermen involved in the folk festival and participants from outside of the community. I closely explore the interactions between them, and analyse their meaning. The second is the involvement of governments. I try to grasp the relations among the three parties. The third is the conditions that support the enlarged festival. I elucidate the historical characteristics of this festival, specifically shedding light on the relations between the folk festival, the subsistence economy of the fishing community, and their transformations.

I visited this community and conducted fieldwork in June 2015 and March 2016. This paper draws not only from this fieldwork, but also from my fieldwork experiences from 20 years earlier; I have been interested in deep sea fishing associations and their transformation, from the Meiji era, which I presented in my doctoral dissertation and multiple articles (Nakano 1999, 2000, 2001, 2003, 2005), ever since.

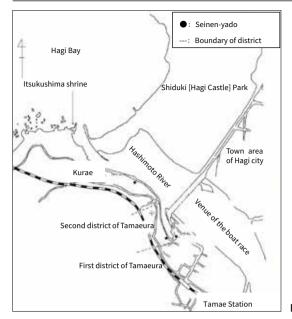


Figure 1. Map of the field: Tamaeura

#### 1.2 An Overview of the Field

Tamaeura is located on the left bank of the Hashimoto River in Hagi city, Yamaguchi Prefecture (fig. 1). Tamaeura consisted of 608 households, or 1330 residents, excluding the Kurae area.<sup>1</sup>

The community is made up of three districts. The people of Tamaeura use another regional spatial categorization, called *jige* 地下, which remains in use today. This old category consists of 4 kumi 組. Each kumi had a shared house called a seinen-yado 青年宿 (youth sleeping place) (fig. 2), where the children of fishermen used to acquire fishing knowledge and skills during the day, and where they slept at night. The seinen-yado functioned as the local hubs of the institution of the fishery, and socially reproduced the local fishery.

The Tamaeura fishery has been officially supported by the activities of the fishery associations since the Meiji period, although the fishery associations have changed over time. Today the Tamaeura fishery association has been incorporated with Yamaguchi Prefecture's association, which has made it more directly susceptible to top-down prefectural fishery policy. Currently, the Tamaeura association consists of 78 regular cooperative

1 Statistical data of the Hagi city, June 2015.



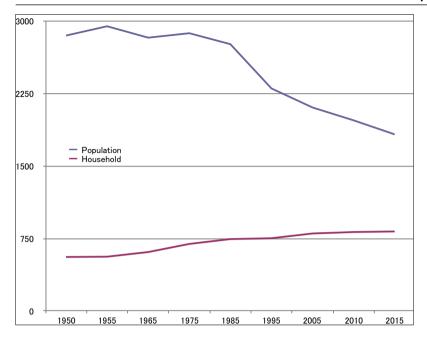
Figure 2. Seinen-yado (1996)

members, and 92 quasi-members. The total number of cooperative members is 170 (June 2015).

We can see Tamaeura is a rapidly aging fishing community. The population and the number of households have declined from 2,873 people and 694 households in 1975, to 1,827 people and 823 households in 2015 (graph. 1). The aging of the population can also be seen in the membership of the Tamaeura fishery cooperative. As of June 2015, the number of regular members was only 78, a reduction by half in 18 years. Of the regular members, none are younger than 30, and only 5 were in their 30s, compared to 18 members who are 80 or over (the largest group), 25 in their 70s, and 15 in their 60s. Thus, 74% of regular members are over 60.

The older fishermen tend to operate along the coast, while those closer to prime working age work further offshore. The main type of coastal fishery is the squid fishery around Mishima Island, which has become the most economically important fishery in Tamaeura. Eight small vessels (less than 19 tons) operated in this fishery in 2015.

Today, faced with an aged population, the Tamaeura fishery cooperative is attempting projects with local, prefectural, and national governments to improve the condition of squid and fixed net fisheries.



Graphic 1. Population and household of Tamaeura

## 1.3 The Oshikuragō of Today (2015)

The Wasen Daikyōsō Hagi Osh ikuragō 和船大競漕萩オシクラゴー (The Big Japanese Boat Race of Hagi Oshikuragō) was held on Sunday, June 7.

The festival itself is slightly complicated, but an outline can be provided. First, one part of this festival is originally ascribed to the fishing community. For example, in 2015, a ritual of Itsukushima 厳島 shrine, located on the cape of the end of the Kurae coastline was done before the race. The board members of the Tamaeura fishery cooperative offer prayers at this ritual, which was conducted by the chief priest of Sanmi-hachiman shrine in the early morning of June 7. The members of Oshikuragō オシクラゴー (originated from a dialect meaning 押し競べ 'boat race'), who crew the Japanese-style wooden boats, offered prayers at this shrine before the ritual and then returned to the community (fig. 3). The Wasen Daikyōsō Hagi Oshikuragō was held after this ritual. It was a large festival with a stage set up along the flood plain of the Hashimoto River. The Tamaeura furusato-matsuri 玉江浦ふるさと祭り was held after the Wasen Daikyōsō Haqi Oshikuragō on the same stage. At this festival, the people of Tamaeura enjoy Karaoke カラオケ, traditional folk songs and etc (fig. 4).

The Wasen Daikyōsō Hagi Oshikuragō was sponsored by the executive committee of Tamaeura furusato-matsuri. This event was conducted in the following order: the opening ceremony, the boat race, and the prize-giving ceremony. The Wasen Daikyōsō Hagi Oshikuragō was held in this order: the preliminary round, the final round, and, finally, the Oshikuragō. The preliminary round and the final round consisted of two parts. One was the junior high school student league, and the other was the adult league. The league for junior high school students was divided into sub-leagues of male and female competitors. The teams of each league that won the preliminary round raced each other in the final round. In 2015, 8 male teams and 7 female teams competed in the junior high school league, while in the adult league a total of 16 teams participated. After the final rounds, the Oshikuragō was held (figs. 5, 6). There are differences in the race method between Oshikuragō and the other leagues, as I will hereinafter describe in detail.

The *Wasen Daikyōsō Hagi* Oshikuragō is administered by Hagi city and is supported by the Tamaeura fishery cooperative. For example, the fishery section also manages the proceedings of the festival, while the mayor of Hagi city gives a congratulatory speech. The person who makes the opening declaration is the Hagi branch manager of the Yamaguchi fishery cooperative.

The Wasen Daikyōsō Hagi Oshikuragō is a complex undertaking. In this paper, the Oshikuragō will refer to the old style race, while Wasen Daikyōsō will refer to the new style race, while the festival as a whole will be referred to as the Wasen Daikyōsō Hagi Oshikuragō.

# 2 The Linkages of the Oshikuragō and the Fishery

# 2.1 The Oshikuragō

There are three traditional explanations for the origin of Oshikuragō. First, the race is described as a way to distribute rights to fish at the net fishing grounds (Ito 1979). Second, there is an explanation that the Oshikuragō originated from the boat of the Hagi Domain head (I use the word 'Hagi Domain' as a synonym for 'Chōshu Domain' in this paper) (Tamaeura Gyogyōkyōdō-kumiai; Hagi kotogakkou shakaibu 1961; Meijidaigaku seikeigakubu 1969). Another traditional explanation says that the winner had to serve as the Hagi Domain head (Yanagi 1934; Tamaeura gyogyō-kyōdō-kumiai). All of these explanations can still be heard, but none is accompanied by strong evidence.

The Journal of Bochō describes the Oshikuragō during the Meiji era. In the following era, I will outline some importnt features of this festival, based on an item from 1902 (Meiji 35) entitled Braving a storm during



Figure 3. Offering prey at Itsukushima shrine (2015)



Figure 4. Tamaeura furusato-matsuri (2015)



Figure 5. The race of juniour high school students (2015)



Figure 6. Oshikuragō (2015)

the boat race. In a ritual of Itsukushima shrine, fishermen held practices in the afternoon, and then offered prayers at the shrine, and afterwards they held the boat race. The boat race was done with four boats, which each belonged to a kumi. The crew for each boat were also selected from that kumi. Seven younger fishermen crewed each boat, with five of them acting as oarsmen. One of the crew held a baton in each hand (like those used by commanders on the battlefield in old Japan), while another held a whip. These fishermen used to work naked, but after directions by the Prefecture and enforcement by the police, they began wearing short sleeved white shirts and undershorts. The boats only raced on the return back course from the point called tsubase ツバセ (a name of net fishing grounds). The ring of a bell started the race, and a special boat enforced the rules of the race. The winner received Japanese sake 酒 as the award, and was recognized as skilled in deep sea fishing. The news item emphasized that fishermen cared deeply about winning or losing the race, in spite of the bad weather.

#### 2.2 The Folkloric Characteristics of the Oshikuragō

In this section, I will explore the folkloric characteristics of the Oshikuragō of Tamaeura, referencing prior research on boat races in Japan. Marshalling data about boat races in Japan, Umino emphasized the people's mentality towards the kami 神 (god), and described the boat races as divided into three types: one is of waiting and meeting the kami, the second is of sending the kami, and the third is of entertaining the kami (Umino 1980). According to this, we can infer that because the Oshikuragō in Tamaeura was held only on the return course, it was related in the distant past to waiting and meeting the kami. Fishermen brought whips in each hand to the head of the boat in the Oshikurago, and waved them (fig. 7). I think that, referencing the ethnographic records, we can interpret this symbolic behaviour as an invitation for the kami of fishery (Umi no Hakubutsukan 2001). There is an additional important detail about the boats of the Oshikurago. As I will discuss later, the Tamaeura people adopted Kairyo qyosen 改良漁船 (improved fishing boats) for the Oshikuragō at some stage. The Meiji government recommended using the kairyo qyosen for deep sea fishing, which originated from the boats made by the Tamaeura people during the Meiji era.

The day after the Oshikuragō is called the *ryō mōsh*i 漁申し (praying big catch), or *Ajiro mawari* 網代廻り (navigating around net fishing grounds for prayers), and during this day the boat goes around the net fishing grounds, as the chief priest conducts a ritual, and fishermen offer prayers for plentiful catches to Ōdoshi shrine (fig. 8). After the ritual, they return to the community, and *mikoshi* 神輿 (a portable shrine) are paraded through the fishing community. The Oshikuragō is one event in a series of rituals of Itsukushima shrine and of Ōdoshi 大歳 shrine over two days.

We can see the meaning of the two-day ritual is related to the Tamaeura people inviting the kami of fishery to celebrate the community itself. From the point on the sea where the boats start the Oshikuragō, the kami of fishery goes through the edge of cape where the Itsukushima shrine is located, and then visits the land of Tamaeura where Ōdoshi shrine is, enshrined with the Ebisu 恵比須 shrine. The next day the kami gets on the mikoshi and the boat, and goes around the net fishing grounds, then returns to the parades for the community.

# 2.3 The Linkage of the Oshikuragō and the Fishery

By 1740 (Ganbun 4), Tamaeura was an average-sized fishing community where fishermen mainly used stationary nets to fish horse mackerel, Spanish mackerel, and Japanese amberjack, using fleets of small boats, and gathered other coastal marine products by hand (Yamaguchiken Monjokan 1980). During the middle of the Meiji period, Tamaeura fishermen extend-



Figure 7. Yakko 奴 and Hyoshi-tori 拍子取り (1997)

ed the range of their fishing grounds from the immediate offshore areas to deep sea fishing grounds using a new style of boat. Two generations of the Harada family built this new style boat which became recommended by the Japanese national government under the policy of the deep-sea fishing law. Many fishing communities came to Tamaeura to learn the construction and fishing method for this type of boat. In Tamaeura, four fishermen crewed this new style boat. These boats would go around the Chōsen Peninsula to fish shark and red sea bream using longlines. In addition, Tamaeura people used these boats for racing in the Oshikuragō from the Meiji era.

The Oshikurago is related to the fishery of Tamaeura. According to fishermen born between the Taisho period (1912-1915) and the first decade of the Showa period (1926-1935), the linkage of Oshikuragō and fishery can be summarized in the following ways. One is that the crew members are selected from the fishery association of Tamaeura. Four kumis make up the deep-sea fishery association; these same kumis make up the association for the rituals of Tamaeura. The fishermen and ships for deep sea fishing each belong to a kumi. A leader known as the ōsendo 大船頭 (a head of boat men) controls the overall association and plays the leading role in the rituals. There are seven crew members on each racing boat (fig. 9). Two of the crew man paddles on either side of the boat, and are called kaikaki 櫂力丰. Except kaikaki, these crew members are chosen through elections which are conducted in each kumi by fishermen who have retired from the seinen-yado. The kaikaki is chosen among the fishermen who have just retired from the seinen-yado. The standard by which the crew members are chosen by election can be divided into two dimensions, one



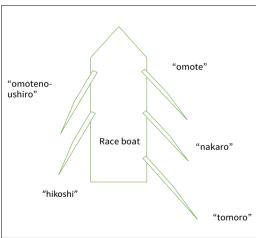


Figure 8. Ajiro mawari 網代廻り(1998) Figure 9. The name and the position of oars of the race boat

of which is the skill and physical build of the person, and the other which is the social dimension. The former is that, for example, it would be better for the tomoro 艫櫓 (an oar positioned at the stern) to be a fisherman who can pull the oar very well. For the social dimension, it was important in Tamaeura that the crew should display good behaviour and work diligently during their days on land and on the sea. The young fishermen who coped with the expectations of the senior fishermen could receive special allowances, in addition to their standard allotment of money. When the voting was held at the seinen-yado, many people with kin relations to the young fishermen walked around the community soliciting votes. If their kin were elected, he and his parents were delighted and felt honoured. The second criterion is linked to the fact that the cost of the ritual was based on deep-sea fishing profits. The osendo collected money called mon-gin 文金 from every deep-sea fishing ship through the kumi. A representative of each kumi collected a constant rate of the money from every fishing ship assigned to his kumi, which was extracted from the value of landings of each ship. Apart from the mon-qin, the expense of the ritual were paid using the congratulatory gifts which were given to the fishery association of Tamaeura by those related to the deep-sea fishing of Tamaeura, such as the people associated with the fish market, ship chandlers, and merchants who supplied consumable goods to ships.

Third is that the Oshikuragō was deeply related to the identity of the Tamaeura fishermen. The fishermen of Tamaeura had an immediate interest in winning in the Oshikuragō. The victorious crews and the people around them were honored at various occasions in the community. For example, the young fishermen ate raw eggs in the morning of the race day to keep up their strength, and they packed their mouths with pickled ume 梅 (Japanese apricot, Prunus mume) just before the race began to avoid becoming thirsty during the competition. If they won the race, they received a bottle of sake and attended a banquet held at the seinen-yado, where they were attended to by young women.

# 2.4 The Transformation of the Oshikuragō

The Oshikuragō can be divided into three historical stages. The first stage is the period when the Tamaeura people were coastal fishermen, and the Oshikuragō was conducted as an event of Itsukushima shrine. The second stage was when the fishermen expanded their fishery to the deep sea, the Oshikuragō became closely related to the fishing association, and developed into an inextricable part of the fishermen's identity. In this stage, the Oshikuragō attracted large audiences. To allow these audiences to see the entire race, the venue of the Oshikuragō was changed from the sea to the river, and the race course also changed in 1916 from a one-way

course to a round-trip course. The third stage is when the Tamaeura fishermen returned their fishery to the shore. As the population of fishermen declined, the venue of the Oshikuragō changed from the sea to the river, and the Oshikuragō began to require competitors from the public with the support of the government of Hagi city.

# 3 The Irreversible Change and Adaptation of Oshikuragō

#### 3.1 Becoming a Large-Scale Festival Under the Government

Today, the government of Hagi city conducts the large-scale festival which encompasses the Oshikuragō.

Hagi city sponsored the festival, Oshikurago, the 400th anniversary of the Hagi Domain capital, because Hagi had been the administrative headquarters of the Hagi Domain during the Edo period. The year 004 was also the 400th anniversary of when Mori Terumoto 毛利輝元 (first Head of Hagi Domain) entered Hagi castle, which was completed in 1604 (Keichō 9) as the castle of the Hagi Domain. According to the government business plan, by sponsoring this festival Hagi city aimed "to encourage interactions among regions in Hagi city", and "to contribute to pass on the traditional culture from generation to generation and the promotion of tourism in Hagi city" (The Fishery Section of the Hagi city 2004). The program of the day consisted of, a) the opening ceremony; b) Ofuna-uta 御船謡 (traditional boat songs) of Sumiyoshi shrine; c) the procession of Nojima nagareya-watashi 能島流矢渡し, Kobaya-bune 小早船 (the traditional Japanese style boats); d) Mishima oshiai 見島押し合い (Mishima traditional boat race); e) the Koshigahama junior high school Japanese style boats race; f) the inter-regional fishery cooperative Japanese style boat race; and g) the Tamaeura Oshikuragō.

I note three characteristics of this festival. The first is the intention of the government of Hagi city to legitimize the tradition of the Oshikuragō. The second is that the way the race was conducted as a competition among multiple fishery communities in Hagi city. The third is that this festival provided an opportunity for the government to become permanently involved with the Oshikuragō.

The government business plan mentioned above states the tradition of this new festival in the following way. In this plan, the Oshikuragō was presented as the relic of the navy of Hagi Domain, and inherited more than 300 years ago. It is said that the Oshikuragō is rooted in the training practices of the Murakami suigun 村上水軍 (navy of Murakami in the Medieval period), which is acknowledged as the most powerful navy in Japan. The Hagi government invited traditional Japanese style boats from Miyakubo-machi, the land of the Murakami suigun. However, there is no

evidence showing a relation between Oshikuragō and Murakami *suigun* in my current survey of the research. Also the geographic range of Hagi city does not have a clear relationship with that of the Chōshu Domain. Hagi city not only emphasizes that the history of oshikuragō has been related to the *Murakami suigun*, but also legitimizes the tradition of the new festival as having a long history by inviting Kobaya *bune* to Hagi city.

The boat race was held on the Hashimoto River, and a race was held that pitted the fishing communities within Hagi city, Tamaeura, Koshigahama, Obata, Ōshima, Mishima, and Susa against each other. Afterwards, the Oshikuragō was held by the Tamaeura community.

A ceremony to celebrate the birth of new Hagi city created the opportunity for the Hagi city government to become permanently involved with the Oshikuragō (The Fishery Section of the Hagi city 2005). Susa-chō, Kawakami-mura, Tamagawa-chō, Mutsumi-mura, Asahi-mura, Fukuei-mura were merged to form Hagi city in March 6, 2005. Hagi city planned events to commemorate the merger of these cities, towns and villages and named this event *Shin Hagi-shi no Wasen Daikyōsō* 新萩市の和船大競漕 (big Japanese style boat race of the new Hagi city). The invitation of Susa-cho to the race and the holding of the Japanese style boat race in 2005 symbolically celebrates the integration of the government. Hagi city strongly framed how the festival could be interpreted. Since the merger of the cities, towns and villages, this festival has been supported by Hagi city under the name *Wasen Daikyōsō* until this day.

# 3.2 Gear Improvement and Sharing Rules

Today, the  $Wasen\ Daiky\bar{o}s\bar{o}$  includes the public, as well as junior high school students as participants. For these new participants to be included, it was seen as an important step for the gear of the boat to be improved. These improvements were related to the junction of the oar and the fulcrum peg. In the standard design, the fulcrum peg was detachable from the cavity in an oar. Generally, the fishermen fit the oars to the boats during navigation, and take the oars off the boats when fishing. When they fit the oars to the boats, they have to lift the oars, and fit them to the fulcrum pegs. This is not difficult for the fishermen, but it is difficult for non-fishermen for three reasons: a) the oar is heavy to lift; b) when fitting the cavity to the fulcrum, the fulcrum peg cannot be seen by the person fitting it, because the cavity is positioned on the underside of the oar; c) the task must be performed while the boat is rocking on the sea.

The Tamaeura fishermen solved this problem by copying the improved gear used in boat races in other regions. Representatives of the Tamaeura fishery association visited Miyakubo-cho in 2005, and received samples of metal versions of the oar cavity and fulcrum peg. These parts half-lock the

cavity and the fulcrum peg to each other to prevent them from detaching. The representatives then returned to Tamaeura and asked the shipyard there to adapt them to the boats used in Tamaeura. The shipyard produced several prototypes, after which it was able to produce usable parts (figs. 10, 11). As a result, even non-fishermen became able to pull the oars without accidentally detaching them from the boat.

The Fishery Section of the Hagi city government arranged for the new participants in the race from outside Tamaeura. Initially, they placed the participants into the interregional format, but because of the increased number of people showing interest, open public recruitment began in 2008.

Here, I will look at the new race – the *Wasen Daikyōsō* – through the application guidelines. The participants in this race do not pay an entry fee, and the fishery section of Hagi city handles the procedures to provide them with accident insurance. Practices are held for approximately one month, during which every team can receive coaching from the fishery cooperative of Tamaeura. The race is a speed competition on a 300-meter straight-line course. The first, second and third place teams receive prizes, which, according to the fishermen, are respectively 100,000 Japanese Yen, 50,000 Yen, and 30,000 Yen.

The number of participants is growing (table 1). Improvements to the oar cavity and fulcrum peg, and the management by the fishery section of Hagi city benefitted the public and the junior high school students, letting them participate in the race, and increasing the size of the competition.

### 3.3 Open Recruitment of the Public and the Wasen Daikyōsō

A total of 16 teams participated in the race in 2015, which are shown in table 1. Six teams were based on workplace relationships (C, H, M, N, O, P), and another six were made up of friends and acquaintances (D, E, G, I, J, L). Teams in these categories were the most numerous. Next were four teams based on other types of friendly associations (A, B, F, K). For example, some members of these teams were linked by the fact that they worked on the water or in fishery, or they belonged to associations related to water sports; for example, a team was formed by members of a yacht club, and another made up of friends and acquaintances who surf together. Some of the teams have participated in the race more than 4 or 5 times, and among them there are many strong teams that often ended up second or third. We can see that there is a stratum of teams which compete every year and are skilled with the oars. On the other side, there are the teams made up of beginners with relatively little experience that aim simply to pass the preliminary round or complete their race. The teams aiming to enter the upper ranks consist mainly of men.





Figure 10. A carpenter arranging the oar cavity in Seinen-yado (1997) Figure 11. The oar cavity made of metal (2015)

Table 1. Team member compositions and profiles

Name of team	Number of male players	Number of female players	Profile of team		
A	5	0	Our team is taking part in this race for the first time in two years. This year, we hope to advance to the final round, to get the money and to enjoy our drinking.		
В	5	0	It is the third time that our team takes part in this race. Our average age is 64. Although we are used to navigate yacht, we take part in this race for acquiring also the ability to pull the oars.		
C	6	0	Our team consists of the staff from the section of water and sewerage of Hagi city. Waterworks Week business is held simultaneously nationwide from June 1 to 7. We take part in this race as a public relations tool.		
D	5	0	Our team is the second-generation of the team <i>tokko yaro</i> 特攻野郎, and inherit its spirit.		
E	5	0	Our team participated in the race last year with another name.		
F	5	0	Our team is called B-HO, we are bike people.		
G	2	3	Our team consists of 3 females and 3 males. 4 of them took part in first time. We aim to make it through the finish line.		
Н	5	0	It is the fourth time that our team takes part in this race. We hope to improve our record of finishing third when our team had participated in first time.		
ı	5	0	Today, we are the most dangerous people since earth had formed .		
J	5	0	It is the fifth time for our team in this race. We hope to get through the preliminaries.		
K	5	0	Our team consists of the people doing surfing, body board, SUP, based in Hagi. It is the fourth time for our team. We finished second last year. We aim to gain the victory changing the players.		
L	5	0	This year too, we'll do our best.		
М	1	4	Our team is based on working relationship. Each of us takes part in this race with colourful costumes. We don't feel confident about the speed but we do feel confident about costume.		
N	5	0	Our team consists of the office staff aged 10s and 20s from the company of Chugoku electric power in Hagi. We aim to gain the victory changing the players.		
0	3	2	Our team consists of the policemen and staff of the gas station. We formed our team, soon after meeting first time each other. We gather only for Oshikuragō.		
P	5	0	Our team consist of the staff from the fishery section of Yamaguchi Prefecture which administration office are located in Hagi city. We could not complete the full distance with trouble. So we aim to make it through the finish line this year.		

Team including female members tend to aim to complete the race, or enjoy themselves with colourful costumes. In brief, the new race is supported by many various personal relations and interests.

The K team is made up of members of a friendly surfing club that is mainly active along the Hagi coastline. The leader of the team, M, discovered the open recruitment in the newspaper, and gathered teammates, and applied to participate. He writes a blog titled *My Surfing Diary*. Drawing on this blog, I will give an overview of their activities.

Their practices are held on weekends, because only M and one other member live within Hagi city. In 2012 they were unable to advance beyond the preliminary round. In 2013, the team was only able to finish in third place. In 2014, they finished second. In 2015, the team won the championship (fig. 12).

M gives three reasons for taking part in the race. One is to enhance the unity of the team. The second is the attractiveness of the large cash prize. The third is that it is a way for him to contribute to the region. Aside of their ordinary surfing activities, the team holds barbecues. They also used to occasionally support the endurance swimming program of the elementary school. In a similar vein, M thought that "to participate in this race was important for him because he lives in Hagi, and he shares the same love of the sea the fishermen have, regardless of victory or defeat" (Surf Monkey 2012). Of particular interest is that when his team captured victory in 2015, the physical sense of the water and the bodily oneness he experienced when pulling the oar, and the memory of this oneness motivated him to continue racing. For example, he writes that he "felt joy when the oar catches on the water", and that "once practice begins, my body remembers pulling the oar, increasing the pleasure I feel each year" (Surf Monkey 2015). His motivations and reasons to participate in the race have been transformed through his practice and racing experience.

The members of K team had a physical sense of the water that they derived from surfing, but it had also changed through the practices and the interactions they had with the fishermen. In the fifth practice of 2015, their fisherman coach said to them "You are surfers, aren't you!", and gave a demonstration, showing them how to position their legs, and emphasizing the strength they need to place on their toes when rowing, and explaining to them that they need to pull with the lower body. This demonstration was done partly because there were crew members who were participating for the first time, but the importance of the demonstration was also a challenge to them – "You are surfers, aren't you!" – which made the surfers conscious of their bodies and the water by recalling to them their own surfing experiences. Thus, skill with the oars was not so much taught to the surfers by the fisherman, as much it was intrinsic to the surfers themselves from their own experiences with the water. In other words, this questioning encouraged the learner's consciousness to change in a qualitative way

by making them realize that the skill is not just that of a fisherman who belongs to a different culture, but also that of their own culture, and it derives from touching the same water. Through this encouragement, the surfers see the race from the point of view of the culture of surfing. Here, we can see the meaning of the interaction between the fishermen and the other team members.

# 3.4 The Diversification of the Oshikuragō: Promotion from the Wasen Daikyōsō to the Oshikuragō

The Oshikuragō used to be conducted by fishermen on the sea, but from 1995 it has been held on the Hashimoto River. Below, I depict the outline of the process.

The deep-sea fishery association of Tamaeura was dissolved in 1992. Because of the decline of fish resources in the East China Sea, the president added to the dissolution declaration that they also discontinue the Oshikurago, and it was approved. But young fishermen who could not accept the end of the Oshikurago, formed the Tamaeura Youth Group, and collected signatures petitioning the fishery association of ship owners to continue the Oshikurago. The fishery association of ship owners had kept just the squid fishery open, which was operated with a small fleet of boats. As a result, the youth received ad hoc economic assistance from the ship owners, and were able to hold the Oshikurago in 1992 and 1993. In 1995, the Oshikuragō was rebuilt as one event in the Tamaeura Furusatomatsuri, which was sponsored by the residents' association on behalf of the fishery association of Tamaeura, and the number of boats was reduced to 3. The youth group became the competitors because of the scarcity of young fishermen. The race is conducted between three districts of Tamaeura: the first district of Tamaeura, the second district of Tamaeura, and Kurae. The Oshikuragō of the present day derives from this race style.

In the 2015 race, the Kurae team was named as the Tamaeura seinendan 玉江浦青年団 (Tamaeura Youth Group). The first district of Tamaeura and the second district of Tamaeura both also shared that name, but each also had another name. The former was named Yatagarasu 八咫烏, which refers to a mythological Japanese crow who guided the Emperor Jinmu 神武. The latter was named Tokkō Yarō 特攻野郎 B team. Tokkō Yarō means 'men of the kamikaze (神風, divine wind) attack'. The Yatagarasu team began as a junior high school team which consisted of childhood friends, and later participated as a public team. It is a strong team, that won first place as a junior high school team, and as a public team in 2011. This team challenged the Tamaeura Youth Group to a race, and has participated as a team in Tamaeura's Oshikuragō since 2012. The Tokkō Yarō B team was formed in 2011. The leader was a member of the Tamaeura





Figure 12. K team (2015) Figure 13. The race boat just before the start (2015)

fishery cooperative from 2005, and created the team because he was attracted to the Oshikuragō. They participated in the race for the first time in 2011, but were defeated by the Yatagarasu team. Subsequently, the team grew into championship hopefuls. In 2015, the Tamaeura Youth Group heard that Tokkō Yarō B team wanted to race with Yatagarasu, and consequently, Tokkō Yarō B team also became one of the teams of the Oshikuragō. As a precondition for joining the Oshikuragō, Yatagarasu and the Tokkō Yarō B team were asked to change their names and re-form, and they did it.

Because of the scarcity of competitors, open recruitment opened to the public, but the public races and the Oshikuragō were separated. If a team became skillfully rowers, the team could be incorporated into the Oshikuragō race. Here we can see that the system reproduces successors in a sustainable way.

Another interesting point about the Oshikuragō is the way participants make sense of the races by dramatizing them. When the race is held, the profiles of the teams are introduced. In 2015, Yatagarasu was introduced as the defending champions, because they had finished first for the second consecutive year. They were described as a team that has joined the race to breathe new life into it. The profile also said that the Yatagarasu is an auspicious bird which marked the beginning of a new era to Amaterasu Ōmikami 天照大神 in Japanese mythology. The profile of Tokkō Yarō B team began by describing the reason for the team's formation, and said that "they can't forget their regret from being defeated by Yatagarasu" (The Fishery Section of the Hagi city 2015). Their introduction said that they would take first place back from Yatagarasu this year.

Through such profiles, the spectators can enjoy the race itself, the team's experiences, and the enthusiasm of the competitors. In sum, the Oshikuragō dramatizes the story of the public race, becoming an event with new meanings.

# 4 The Conditions for the Big Japanese Boat Race of Hagi Oshikuragō

# 4.1 The Dual Nature of the Tamaeura Youth Group

The present Oshikuragō consists of former public teams and the Tamaeura Youth Group team. The former public teams each also bear the name of the Tamaeura Youth Group. When we compare the profiles of the Tamaeura Youth Group and the former public teams, we can find the differences between them.

The profile of the Tamaeura Youth Group strongly expresses how it will meet the challenges from the former public teams, by stressing its character as a team that has inherited the character of the fishing community, and is based on its co-operation with prominent members. It brings their inheritance of the social relations and traditions of fishing community to the foreground. The profile does not make obvious a dramatized story, but it does not strongly imply the significance of meeting challenges from the public teams. The present Oshikuragō is positioned between the dramatic character of the new public participants, and the communal and traditional character of the fishery community.

### 4.2 The Conditions of the Oshikuragō

Teams that can advance to the Oshikuragō must meet at least the following four conditions. The first is that a team has to be skilled with the oars. Specifically, a team must be able to use oars without the improved metal cavity or fulcrum peg, because the crews have to use different boats and oars for the Oshikurago. The second is that the team must consist partly of people from Tamaeura, so for, example, Yataqarasu includes a number of Tamaeura people. The third condition is that a team must include a number of Tamaeura fishery cooperative members. The Tokkō Yarō B team has two members who are part of the fishery cooperative. The fourth is that a team must have two additional crew members on board in addition to the usual five members. These two members must man the paddles during the race to propel the boat, but when the boat turns at the half-way mark, one of them is needed to take a flag from a buoy which marks the turning point. They must also wear special costumes. One of them is called the Yakko 奴, and he must hold a baton in each hand and wave them. The other is called the Hyōshi-tori 拍子取り. This person must bring wooden instruments for keeping the rhythm on the boat. The team must have room for these two members, who appear to have no competitive value. But as discussed above, the Yakko and Hyōshi-tori may be derived from customs based on the lore related to inviting the kami of the sea to Tamaeura. Needless to say, the fishery section of Hagi city does not explain these elements.

In actuality, the teams that takes part in the Oshikuragō are practically limited to those composed mainly by Tamaeura fishermen and people living in Tamaeura. There is an invisible barrier between the public and the Oshikuragō, and between what is expressed in the profile and what actually takes place. To understand the present Oshikuragō appropriately, we have to consider their reason for keeping up the autonomy of Oshikuragō within the community, with reference to the invisibility of the barrier in the promotion system.

# 4.3 The Fishery Community Supporting the Big Japanese Race of Hagi Oshikuragō Behind the Scenes

The Tamaeura fishermen teach the knowledge and oar skills to junior high school students and to the public. In the case of the 2015 races, coaching began on June 11. Practices were held almost every day, beginning around 5 p.m. on weekdays, and 1 p.m. on weekends. Each practice was an hour to an hour and a half long. There were 15 coaches, who were drawn from the staff of the executive committee of the *Tamaeura furusato-matsuri*. Their average age is 75, except for two fishermen in their 40s who started working as fishermen in the twentyfirst century. Because all of them are active fishermen, they may go out fishing after 6 p.m., and so practices did not go beyond 6 p.m.

Twenty-three fishermen support the public race working on five boats each with different roles. For example, the outboard motor boat called the *shidō-sen* 指導船 (coaching boat) leads the racing boats. The *shidō-sen* tugs the Japanese-style boats used in the races after the crew boarding to the starting point. After the start of the race, the *shidō-sen* moves to the fishing and waits for the racers to arrive, after which it will return them to the boat-slip, and put the crew back on shore. The outboard motor boat fixed at the start point, called the *kotei-sen* 固定船 (fixed boat), keeps the race boats from moving at the start point before the race begins thanks to a rope with one end fixed to the boat and the other held in a fisherman's hands. When the race boats are waiting for the race to start, they pull their oars to push their boats against the rope, stretching it tightly between their boats and the *kotei-sen*. At the ring of the bell, the race starts and the rope is released by the fisherman on the race boat (fig. 13).

There are also two fishermen aboard each race boat. One of them, positioned at the stern, grasps a detachable helm during the race (fig. 6). Another fisherman is positioned at the bow, and copes with troubles such as an oar becoming detached, or the cord fastening the oars and the boat becoming untied. After the race they detach the oars and support the crews putting the oars in order on the boat. More than half of the 15 coaches have multiple roles, on the  $shid\bar{o}$ -sen, kotei-sen,  $hansh\bar{o}$ -sen 半鐘船 (a boat that carries the bell), or kyujyo-sen 救助船 (rescue boat). Practically, there is only room for six fishermen on board in a race boat. Because of this difficult condition, four young fishermen try to board each race boat on race day. They are in their 30s to 50s, and are engaged in the squid fishery during the fishing season. They cannot substitute for each other, or take rests because each race involves four teams, and are on a tight schedule. They work on the boats at almost their full capability.

# 5 Conclusion: the Power to Shape the Interpretation of the Folk Festival

## 5.1 The Meaning of the Regional Folk Festival for the Government

The Oshikuragō is registered as neither a tangible nor intangible folk cultural asset by the national government, Yamaguchi Prefecture, or Hagi city. In Hagi city, the Oshikuragō is not managed under the cultural preservation system, but by the fishery section of the local government. This is one of the unique characteristics of the Oshikuragō compared to other governments' concern with regional festivals, which tend to operate from the point of view of cultural assets preservation. The Fishery Section of the Hagi city government aims "to encourage interaction among regions in Hagi city", and "to inherit the traditional culture and promote tourism in Hagi city" (The Fishery Section of the Hagi city 2004, 2005).

On the encouragement of interactions among regions in the city, as mentioned above, the Oshikuragō has been conducted with the participation of many regions within Hagi city, and from other Prefectures. These steps have made the Oshikuragō widely accepted, supporting its opening to the public. In this sense, the aim of encouraging interactions among regions in Hagi city appears to have been achieved.

On the inheritance of the traditional culture, we must begin by discussing its definition. The public teams were able to take part in the Oshikuragō and compete in a Japanese style boat because of the introduction of modified metal boat parts, which made it possible for them to join the race. These led to the development of highly skilled teams, and the production of a system for socially reproducing the crews for the Oshikuragō. However, we must take note that the public teams are not able to operate unmodified boats. In addition, the public teams cannot rely on their own skills to steer the boats. The helm must be taken by a fisherman. Finally, these boats do not include members to take the roles of Yakko or Hyōshi-tori, because the public teams have been created with five members, rather than the seven members of the Oshikurago crews. Together, these points show that the public teams are participating in a simplified version of the race. In actuality, there exists no common standard for determining "traditional culture" between the fishing community and the city. In other words, how the use of modified boats and teams in the races relates to the inheritance of traditional culture is a guestion that has been left unresolved.

As mentioned above, to pass on the big Japanese boat race of Hagi Oshikuragō, there must be a system for public teams to become Oshikuragō teams, and support the fishermen's coaching for the public team practices, in both financial and labour terms. However, the government cannot be expected to deal with these issues, because Hagi city is not concerned with the Oshikuragō as a cultural asset. Moreover, the 'big Japanese boat

race' is positioned only as an 'opening act' to the Oshikuragō. Unless the government defines 'traditional culture', and takes concrete measures to inherit it with Tamaeura, the people of Tamaeura will be forced to continue their struggles without being able to see a future resolution.

#### 5.2 Conclusions

This research asserted the following points, ethnographically depicting the new festival from the point of view of the fishing community.

The first is the interrelation between the competitors from the public and the fishermen. The public competitors can take part in the big Japanese race of Hagi Oshikuragō, and if the four conditions mentioned above are met, they are able race as a team in the Oshikuragō. When the team from the public acquire skill as oarsmen, the ability to connect the fishermen's skills on the sea and, for example, their experiences on the sea as surfers produced an important effect. The interactive communication between fishermen and the public teams sustainably creates a motivation for people to participate, as it did for the team who were able to learn the bodily experience and the pleasure of rowing a Japanese-style boat.

The second is that the involvement of the government with the Oshikuragō is arbitrary. On the one hand, the government utilizes the festival as a means for integrating the Hagi region, while on the other hand, the government distances itself from the communal festival. The attitude of the government is especially evident in the fact that it left the definition of 'traditional culture' unresolved. The government does not recognize the difference between the fishermen and the public, nor is it able to deal and solve the problems to relate them. In spite of these issues, the government utilizes the Oshikuragō to legitimize its own integration, and to address emergent political requests.

The third is historical context. The practices of fishermen and the members of the public around the Oshikuragō are unique in the context of contemporary fishery communities. The fishing community has been unable to secure successors for the fishery. The community has also been exposed to aging and population decline to the extent that they have begun to lose their autonomy. The contemporaneous wide area merger of cities, towns and villages, and of fishery cooperatives also contributed to this situation. By understanding the concerns of the government in relation to this historical context, we can assert on the one hand, that we can identify which powers interact with each other, and how they direct the change of the folk festival. On the other hand, we can also realize the profound diversity of the interactions between the fishermen and the public teams, without reducing them to a dichotomous frame.

The change in the Oshikuragō has already become irreversible. Under

these conditions, how will this festival be passed on from generation to generation? I think that one of the answers depends on how the Tamaeura fishermen can work with the government to reduce the burden they bear. Another depends on whether they can find a new meaning for the Oshikuragō outside fishery, as fishermen continue to hope in these difficult days. Because it is together with these new participants that the fishermen are being forced to think about the meaning of their race.

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### **Bibliography**

- Adachi, Shigekazu (2010). *Gujyo-hachiman Dento wo Ikiru; Chiiki-shakai no Katari to Riality* 『郡上八幡伝統を生きる: 地域社会の語りとリアリティ』(Tradition and Life in Gujo-Hachiman: Narrative and Reality in the Local Community). Tōkyō: Shin-yo-sha.
- Ito, Akira (1979). "Nagato Tamaeura no Shakai to Benten-matsuri" 「長門 玉江浦の社会と弁天祭」 (Society and Benten Festival of Nagato Tamaeura). Ethnos 『えとのす』, 12, 83-9.
- Hagi Koto-gakkou Shakaibu (1961). "Hagishi Tamaeura no Chosa-hokoku" 「萩市玉江浦の調査報告」(Report of an Investigation of Tamaeura, Hagishi). Shakaibu Chosa-hokoku 『社会部調査報告』 (Social Reearch Club Study Report), 13, 1-30.
- Kogure, Shuzō (2015). "Ama no Kankō Shōhinka wo meguru Sho-mondai" 「海女の観光商品化を巡る諸問題―千葉県御宿における〈観光海女〉の事例から―」(On the Problems of Japanese Female Shell Divers Around the Commercialization and the Tourism). Kaiyo Ningengaku zasshi 『海洋人間学雑誌』 (Journal of Japan Society for Maritime Activity), 3, 25-35.
- Hagishi Tamaeura Gyogyo-kyodokumiai (n.d.). "Tamaeura to Seinen-yado" 『玉江浦の青年宿』(Sleeping Lodge for Young Men of Tamaeura). Hagi: Tamaeura no Seinen-yado, 1-33.

- Martinez, Dolores P. (2004). *Identity and Ritual in a Japanese Diving Village: The Making and Becoming of Person and Place*. Honolulu: University of Hawaii Press.
- Meiji Daigaku Seikeigakubu. (1969). "Seinen yado no Mura" 「青年宿のムラ」(Village of sleeping lodge for youth men). Shakaigaku kankei zeminaru hokoku 『社会学関係ゼミナール報告』 (Report of the Seminar on Sociology), 5, 261-99.
- Nakano, Yasushi (1999). "Gyomin ikusei ni okeru Kandara no Igi: Tamaeura no enyou gyogyō to gyokakubutsu bunpai seido" 「漁民育成におけるカンダラの意義―玉江浦の遠洋漁業と漁獲物分配制度―」(The Significance of Kandara (Catch Allocations) in the Upbringing of Fishermen: The Deep-sea Fishing Industry of Tamaeura and the Distribution System of the Fishing Catch). Bulletin of the Folklore Society of Japan 『日本民俗学』, 218, 25-54.
- Nakano, Yasushi (2000). "'Naisho gane' Kou: Yamaguchi-ken Tamaeura ni okeru wakamono to ie no kikkō kankei" 「内証金」考一山口県玉江浦における 若者と家の拮抗関係一」(On 'the Secret Money': the Antagonistic Relationships Between Youth and Ie(household) in Fishing Village, Tamaeura Yamaguchi-Prefecture). *Journal of Comparative Family History*『比較家族史研究』, 14, 3-22.
- Nakano, Yasushi (2001). "Ryōshi konjyō to Nagusami: Kobune ryōshi ni miru Oi no genjitsu to sono uketomekata" 「漁師根性とナグサミ―小舟漁師に みる老いの現実とその受けとめ方―」 (Fishermen's Spirit and Nagusami: Aging and Its Acceptance of Small Boat Fishermen). Bulletin of the National Museum of Japanese History 『国立歴史民俗博物館研究報告』, 91, 361-78.
- Nakano, Yasushi (2003). "Shirobae Kou: Soko haenawa ryōshi no Gyojyō Ninshiki to folk model no igi"「シロバエ考一底延縄漁師の漁場認識とフォーク・モデルの意義一」(Deep-sea Long-Lining Fishermen's Fishing Ground Recognition and the Significance of Folk Models). *Bulletin of the National Museum of Japanese History*『国立歴史民俗博物館研究報告』, 105, 215-64.
- Nakano, Yasushi (2005). Kindai Nihon no Seinen-yado: Nenrei to Kyōso no Minzoku 『近代日本の青年宿―年齢と競争原理の民俗―』 (The Sleeping Lodge for Youth Men in Modern Times of Japan: Folkways of the Principles on Age and Competition). Tōkyō: Yoshikawa-Kobunkan.
- Ōta, Yoshinobu. (1993). "Bunka no Kyakutaika: Kankō wo tōshita Bunka to Identity no Sōzō"「文化の客体化一観光をとおした文化とアイデンティティの創造」(Objectification of Culture: The Creation of Culture and Identity in the Tourist World). *The Japanese journal of ethnology*『民族学研究』, 57(4), 383-406.
- Surf Monkey (2012). "Sukoshi dake Wasen wo Kogu kotsu ga Wakatte kita"「少しだけ和船を漕ぐコツが分かってきた」 (I Have Been Grasping Little by Little the Techniques of Pulling Japanese Style Boat). My Surfing Diary 02 『サーフモンキーの波乗り日誌 02』(online). URL http://sfmky78224jd-kut3.blog.so-net.ne.jp/2012-05-28#more//\*\*\* (2016-11-23).

- Surf Monkey (2015). "Hagi Oshikuragō Renshu 3 nichi-me Risō no Kogikata" 「萩おしくらごう 練習 3 日目 理想の漕ぎ方」(*Hagi Oshikurago*, the third day of the practice, Perfecting our stroke). *Surf Monkey TV*『サーフモンキー TV』(online). URL https://www.youtube.com/watch?v=HaioA8r6xE8//\*\*\* (2016-11-23).
- The Fishery Section of the Hagi city (2004). Hagi no Wasen Daikyōsō Jigyō (Kaifu 400nen Kinen Jigyō) Keikakusho 「萩の和船大競漕事業(開府400年記念事業)計画書」 (The Business Plan Document of Japanese Boat Big Race of Hagi [The plan of the 400th anniversary of the Hagi Domain capital]).
- The Fishery Section of the Hagi city (2005). Shin Hagishi no Wasen Daikyōsō Jigyō (Gappei Kinen Jigyō) Keikakusho 「新萩市の和船大競漕事業(合併記念事業)計画書」 (The Business Plan Document of Japanese Boat Big Race of New Hagi city [The plan of the commemorating of the municipal merger]).
- The Fishery Section of the Hagi city (2015). Hagi no Wasen Daikyosō [Shikai you Program] 「萩の和船大競漕[司会用プログラム]」 (Japanese Boat Big Race of New Hagi [the Program Document for the Emcee]).
- Ueta, Kyoko (2007). "Kaso Shuraku ni okeru Minzoku Buyō no 'Hozon' wo meguru ichi Kōsatsu: Kumamotoken Itsukimura Kajiwara shuraku no taiko odori kara" 「過疎集落における民俗舞踊の 「保存」 をめぐる一考察: 熊本県 五木村梶原集落の「太鼓踊り」 の事例から」(About a "Preservation" of Traditional Dance in a Depopulated Community: A Case Study of a "Preservation" of Taiko-Odori in Kajiwara, Kumamoto Prefecture). *Journal of rural studies* 『村落社会研究ジャーナル』, 14(1), 13-22.
- Umino, Kiyoshi. (1980). "Fune-kyōsō no Minzoku" 船競漕の民俗 (Folk Customs of Boat Races). *Minzokugaku Hyoron* 『民俗学評論』, 18/19, 45-84.
- Umi no Hakubutsukan (2001). Nihon-retto ni okeru "Fune-kyosō" no Sonzai bunpu chōsa-hōkokusho 『日本列島沿海における 『船競漕』 の存在分布調査報告書』(Report on a Survey of the Traditional Boat Race, Its' Survival and Distribution in the Japanese Archipelago). Toba: Umi no Hakubutsukan.
- Yamaguchiken Monjokan. (1980). *Bōchō Jige Joshin*. 『防長地下上申』(A Report of Survey to the Bōchō Area by Bochō Domain), 4. Yamaguchi: Yamaguchiken chihōshi gakkai.
- Yanagi, Keinosuke (1934). *Tamaeura to Seinen-yado* 『玉江浦と青年宿』 (Tamaeura and Sleeping Lodge for Young Men). Hagi: Tamaeura Fishery Association.
- Yasumuro, Satoru (2005). "Suiden Gyorō to Gendai Shakai: Kankyō Shisō to Folklorism no Kōsaku"「水田漁撈と現代社会 -- 環境思想とフォークロリズムの 交錯」(Paddy Field Fishing Today: The Interplay Between Environmental Thought and Folklorism). Bulletin of the National Museum of Japanese History『国立歴史民俗博物館研究報告』, 123, 49-83.

#### Small-scale Fisheries in Japan

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

# **Seven Years after Disaster**Fisheries Communities in Coastal Pacific Tōhoku

Johannes Wilhelm (Keio University, Japan)

**Abstract** This paper gives an overview on several problems in fishing villages of Sanriku in the course of reconstruction after the tsunami disaster in March 2011. The focus is put on two communities on the Eastern and Western side of Oshika peninsula to show differences in efforts and success. Furthermore, qualitative observations on the micro level are included, i.e. internal conflicts within communities and regional policy-making during the reconstruction process, to enable a more differentiated view on problems that local residents and communities have been facing since disaster.

**Summary** 1 Introduction. – 2 The Setting. – 3 Reconstruction. – 4 Conflict and Livelihood during Reconstruction. – 4.1 Case 1: Mr. M. – 4.2 Case 2: Mr. K. – 4.3 Internal Frictions and Support. – 5 Population Decline and Demography. – 6 The Next Five Years.

**Keywords** Sanriku. March 2011. Tsunami. Disaster. Fisheries. Aquaculture. Reconstruction. Demography.

#### 1 Introduction

On March 11, 2011, the Coastal Pacific Communities of Sanriku were severely hit by multiple tsunamis following the Great Tōhoku Earthquake measuring a moment magnitude of 9.0 Mw. The events affected the fisheries sector from northeastern Pacific Tōhoku to virtually all over the Pacific coastline in Japan from the northern Hokkaidō to Okinawa in the southwestern tip of the Japanese archipelago (Hamada 2013, 67). However, the situation was particularly severe in two prominent Prefectures of fishery industry: Miyagi and Iwate, in Pacific Tōhoku, in immediate vicinity to the epicentre, where virtually all coastal facilities were washed away and hence coastal people lost their livelihood.

The Tōhoku region has been often attributed a backwardness (Kawanishi 2015) due to the fact that the industry of this region has largely been characterised by the primary economic sector over the centuries, and even the naming of the region (東北 lit. 'Northeast') represents a periphery itself, which goes back to the ancient naming Ōshū (奥州) or Mutsu (陸奥), literally

meaning the 'Hinterland'. During the postwar phase of the economic miracle Tōhoku was a main source of human labour, when the young population left their homes in the countryside to the booming industrial centres at the Pacific belt between Kantō (Tokyo) and Kansai (Osaka) as 'golden eggs' (kin no tamago 金の卵). Today, the general ageing of population represents a severe problem in Japan, yet this demographic trend particularly affected Japan's rural peripheries - like Tōhoku - where the downward spiral already became visible in the 1960s (Wilhelm 2016, 25). The fisheries sector was no exception and the fisheries population had been shrinking since the 1970s (graph. 1). When disaster struck, Tōhoku's local industry was already more or less in a deteriorating state and calls for structural change had been put on the political agenda. However, the situation worsened over the years. The small- to middle-sized urban centres of Tōhoku - except for the booming cities like Morioka and Sendai - were more or less in a desolate state characterised by shattā-qai (シャッター街; closed stores in traditional shopping malls) and abandoned houses in the countryside since the burst of the bubble economy and the following years of deflation.

In this paper I will discuss the situation in some coastal communities before and after March 2011 to show the wide variety of problems faced by local residents in a post-disaster situation. My main focus will be placed around two coastal communities of Oshika peninsula (Miyagi Prefecture), Yoriiso and Momonoura, respectively. While located on both sides of the peninsula, the situations and outcomes since disaster differ considerably so that these two cases are very much suited to reflect on strategies and problems in the course of livelihood reconstruction after disaster. Unlike other authors on this topic,¹ I will include qualitative observations on the micro level, i.e. internal conflicts within communities and regional policy-making during the reconstruction process, to enable a more differentiated view on problems that local residents and communities have been facing since March 2011 that not rarely tend to be ignored and get 'lost in numbers' through quantitative approaches.

The paper starts with a brief description of main features we find in Sanriku and its fisheries. The following section is focused on reconstruction and recovery: the former will cover the administration framework for reconstruction, while the latter is more centred on local aspects, including conflicts that occurred during recovery, as much as how individual actors activated assets to overcome calamity.

<sup>1</sup> For instance Hamada (2013) or Aldrich, Sawada (2015). The paper is based on past publications by the author (Wilhelm, Delaney 2013, Wilhelm 2013) with updated data which became available meanwhile. A different version of the paper with an identical text in most parts is in print at the University of Vienna's series *Beiträge zur Japanologie*.

# 2 The Setting

The Pacific coast of Tohoku can be split into two different sectors with their specific topographic features. The southern coast, from the shores in Fukushima Prefecture in the South up to the Mangoku-ura bay in Ishinomaki. is characterised by sandy beaches, while the northern part is rocky and cliff-sided, and engraved by small rivers which formed the so called ria bays over the time. The latter part is also referred to as Sanriku coast (Sanriku kaigan 三陸海岸), a name literally meaning 'three riku' pointing to the three temporarily existing provinces of Rikuzen 陸前. Rikuchū 陸中 and Rikuō (陸奥 also read Mutsu) in the early Meiji era that each included the Chinese character for 'Ashore' which is the meaning of riku 陸. The Oshika peninsula represents the southern end of the Sanriku coast, and the island Kinkasan in front of the southern tip has been an important landmark and thus a place of worship by fishermen who have accessed the so called waters of Sanriku-oki, which are famed for their wealth in marine resources. On the other hand, the ria bays that characterise the Sanriku coast provide excellent conditions for maritime aquaculture that has developed since World War II, for why this region shows a high density of fishing ports with adjacent small hamlets. For instance, in Nagasaki and in Hokkaidō Prefectures we find more than 280 of them, the highest numbers of fishing ports. However, when putting these in relation to the overall length of the coastline we find a fishing port every 15 kilometres in the two above mentioned Prefectures, while in Miyagi and Iwate the density is approximately three times higher (table 1).

Japan's fisheries industry expanded its operations to the open seas after World War II, even though the roots for this expansion reach back to Meiji era. After offshore and pelagic fisheries production reached a peak in the middle of the 1980s, these sectors experienced a harsh decline later, most possibly due to a beginning global resource depletion and the rise of new players in the global fisheries industry such as Indonesia and China. However, the coastal fisheries sector's production including cultivation fisheries remained stable in comparison to the offshore sector (graph. 2). Today, the coastal fishery sector in Sanriku is characterised by many smallscale operators - most often family run and thus with a relatively high amount of female workforce (graph. 3) - which are organised within the local Fisheries Cooperative Association (FCA) branch. Another feature of Sanriku's fishery sector is the extensively developed aquaculture that has been mentioned above (graph. 4). Therefore we also see a high diversity of cultivated species (graph. 5) that ranges from different seaweed over seasquirts, urchin, sea cucumber or fry for scallop. On the other side, there exists an effectively organised pelagic fishery in many villages' fishing ports, such as the highly mobile fleets for offshore squid fishing operations, as much as onshore facilities or lodging of the crew in ports and harbours.

As mentioned above, the impact of destruction after the quakes of March 2011 hit the Sanriku region severely. Virtually all fishing vessels and fishery facilities (ports, rafts for cultivation, etc.) have been destroyed by multiple tsunamis in Iwate and Miyagi, and most gear and facilities were lost (tables 2 and 3). Furthermore, the entire coastline sunk up to 1.2 metres (in Ayukawa at the tip of Oshika peninsula), for why the wharfs had to be lifted to enable fishing and landing operations. In addition, the debris inside the coastal water made fisheries operations in coastal waters virtually impossible, not to mention the lack of vehicles to do so.

Summing up the physical damage in the fisheries industry by the events following the Great East Japan Earthquake we can record that nearly all coastal facilities were destroyed or at least in a dysfunctional state. Moreover, the fishery in Fukushima Prefecture had to halt operations due to the contamination by radiation emitted by the wrecked nuclear power plant Fukushima Daiichi. It should also be noted here at this point that some radioactive plumes during the dramatic events at the plant obviously dropped over the Oshika peninsula at the coast and in the interior region around Kurihara (northern Miyagi Prefecture) and Ichinoseki (southern Iwate Prefecture) where higher radiation values were measured.<sup>2</sup>

The following section gives a brief overview of the reconstruction policy in the fisheries sector developed in Miyagi Prefecture while partly referencing to the plans in Iwate Prefecture.

#### 3 Reconstruction

Quite soon after disaster struck, the Japanese government launched recovery efforts by rebuilding homes and infrastructure, and providing employment and income for those affected. Some of these policies and programs have been a great help for locals trying to rebuild their lives; others, however, have left people frustrated and confused. An administrative framework for reconstructing Miyagi's fisheries was first discussed when Miyagi Governor Murai Yoshihiro announced the idea of Special Zones for Reconstruction of Fisheries (Suisan-gyō fukkō tokku 水産業復興特区, hereafter to be referred to as the 'Fishery Tokku' or simply 'Tokku') at the Fourth Quake Reconstruction Design Council (QRDP) meeting on May 10. These Fishery Tokku are to be distinguished from Reconstruction Tokku (Fukkō tokubetsu kuiki 復興特別区域 or simply Fukkō tokku 復興特区), which denote a set of administrative rules and measures in designated areas affected by disaster.

<sup>2</sup> In fact, the level contamination in these regions were much lower than in Fukushima Prefecture. However, in July 2011, beef and rice straw was found to be highly contaminated in Kurihara and Ichinoseki areas, inducing a harsh drop of beef prices produced in Tōhoku (see Ministry of Agriculture, Forestry and Fisheries 2011)

The initial idea of these special fishery zones was to simplify administrative priorities when allocating sectoral fishing rights used for aguaculture (table 4). Opening these fishing rights up to outsiders was an attempt to raise needed capital from external investors. Doing so would shift the assignment of sectorial fishing rights from local fisheries cooperative associations (FCAs) to people who had no historical connection with the local fisheries. The idea was to encourage outsiders to bring in much-needed capital for rebuilding. Murai's initiative, however, was poorly prepared: he missed vital consultations with the IF Miyagi (the head organisation of FCAs) in advance of the meeting, which led to a strong opposition by FCA members, who collected the signatures of 14,000 fishermen against the Tokku plan. Fishery Tokku have been included in the National Reconstruction Plan, however, only one of special zone became eventually introduced in the village of Momonoura (Ishinomaki) at the Western side of Oshika peninsula on September 1, 2013. Another - more immediate and much criticised - outcome of the discussion surrounding Fisheries Tokku during 2011 was that Miyaqi Prefecture's fisheries reconstruction plan eventually took shape with a half year delay compared to Iwate Prefecture.

On the other side, Japan's fisheries authorities developed a scheme to finance reconstruction for local fishermen smoothly and quick. Within this plan were payments to rebuild fisheries following specific rules for several kinds of operators. These plans provided start-up money and operating costs for a set amount of time, decreasing over time such that after several years they are expected to operate on their own.

JF Miyagi and its branch FCAs served as agents for consultation and support during the application and negotiation of this administrative program. In coastal settlements, FCA members were employed by the FCA itself to help clear and burn debris in the port areas. This work program had two benefits: first, members were provided with much-needed, though precarious, income, while they are unable to resume fishing activities or cultivation. Second, through this work they were making the ports usable for the future also regarding facilities for processing the landed catch. Thus the program met both present and future needs. Some groups along the coast benefited to a modest degree from such programs.

Aside from these specific plans which are only available to certain groups meeting certain conditions, how could the affected fishermen generally make their living without a fishing income? Even in cases where fisheries labour is a part-time or short-term work, it still provided vital income for fishermen's families. Immediately after disaster a temporary support system by government started to remove and collect debris from fishing grounds, a kind of self-help program for fishing villages financed by local government. To apply for this program, at least five fishermen had to join together. Yet, soon after the immediate time after disaster job opportunities in fisheries and other sectors were extremely rare along the Pacific coast. In the course of recon-

struction many fishermen found jobs in the construction industry. However, this trend has made many former fishermen disconnected from their habitat and livelihood by choosing a job in construction in the urban city.

The reconstruction in Miyagi Prefecture is planned over a period of ten years (2011 to 2020) which are further divided into the three phases of restoration (three years), regeneration (four years), and development (three years) (table 5). In comparison, the reconstruction plan by Iwate Prefecture allocated an overall period of nine years, thus a year less than Miyagi. Another difference is visible in how local actors are integrated during reconstruction. In Miyagi Prefecture the main bias of reconstruction was laid on an improved efficiency by restructuring the infrastructure of fishing ports as much as introducing new types of business, whereas in Iwate Prefecture the focus was put on restoring livelihood through traditional local business structures, i.e. FCAs. An evaluation of the outcome of each reconstruction plan is not possible at the time of writing, yet, we might generalise that in Miyagi the authorities have integrated (neoliberal) elements in a piggyback system to solve problems in the fishing industry's structure that have already been visible before disaster struck. Regarding Fisheries Tokku, we have to wait until 2018 - when new fishing rights are allocated by government - to see if this will turn out a fertile and sustainable policy for the future fisheries of Miyagi Prefecture.

Apart from these policy measures explicitly pointing to the fisheries industry we have to mention two important parts of reconstruction efforts by government, i.e. the relocation of housings to higher ground, as much as the construction plans for tsunami walls along Sanriku's coastline. Besides these plans we have to be aware that Sanriku's fisheries industry is embedded in local, regional, national and international contexts where different needs, problems and conflicts emerged during the course of reconstruction. Some of these are illustrated in the following section.

# 4 Conflict and Livelihood during Reconstruction

In the following I will try to shed light on conflicts in coastal communities of Southern Sanriku to show different types of problems faced by local residents and related actors during the first half of Miyagi Prefecture's reconstruction period (i.e. five years after disaster, while the reconstruction's plan is designed for ten years). We will see that many residents have been more or less successful in overcoming personal calamity, while the situation of the latter differs not only locally, but, also regarding the state of the reconstruction process at a specific time with its specific situation that sometimes even relate to global politics. I will therefore try to show internal frictions as much as risks local people are facing in the course of post-disaster reconstruction.

I will first illustrate how two individual actors managed to restore the livelihood of many residents by referring to the so called Sustainable Livelihoods Framework (Scoones 1998, DFID 1999), hereafter referred to as SLF (graph. 6), for the model provides a tool to analyse the outcome of activities by individuals or groups to overcome calamity.

#### 4.1 Case 1: Mr. M.

M. is a local fisherman and vendor of marine products (principally seaweed, scallops and sea squirts) in Yoriiso. Due to lucky circumstances, M.'s house on a hilltop at the harbour was not affected by the tsunamis. Concerned about radiation and tough work that had to be done after March 2011, he let his wife temporarily move to Tokyo where their daughter studied design. His activities focussed on restoring his processing facility and adjacent trading company for marine products. As his former facility had been refurbished two years before disaster (partly with governmental subsidies) he could take advantage of a special emergency support program provided by government soon after disaster and before a general subsidy system came into effect. He succeeded reopening his business in April 2012, providing 12 residents with jobs. M. took advantage of a institutional framework he could fit in to reconstruct not only his own business very soon after disaster, but, also to provide job opportunities for local residents earlier than general support programs came into effect. M. succeeded in activating assets such as social capital as much as financial capital that was institutionally available.

#### 4.2 Case 2: Mr. K.

K. is the only descendant of a three and a half centuries old honke (main branch) family of local merchants denoted isaba (五十集 a traditional wholesaler and net-owner). The huge and prestigious residence above the harbour was washed away. After disaster, K. initially only thought to reconstruct his diesel and oil business while giving up his trading company for marine products (export of sea squirts = ascidian = hoya 海鞘 to Korea). His processing facility at the port of Yoriiso used to be the largest before disaster, providing local residents a job opportunity. Eventually, he succeeded in rebuilding his marine processing sites in Yoriiso and near Ishinomaki's central fishing port until April 2014.

Being connected to partners, friends and customers across great distances is common among coastal fishermen. Among the volunteers and supporters of the disaster relief efforts fisheries industry, many such friends reactivated their bonds and formed self-help groups. The Friends

and Supporters of the Sea (FSS, or Kaiyū shien-tai 海友支援隊) is one such group. FSS was set up just a couple of weeks after the March disasters as a company by former high school friends in their fifties and sixties to support rebuilding Yoriiso's local fishery and livelihood of residents. Its members' relatively advanced age distinguishes this group from other - mostly vounger - volunteers. The three core members have all had successful careers as businessmen before March 2011, and now that their adult children have left home they have enough time and financial stability to focus on their new activities as experienced and locally respected persons. Based in central Ishinomaki, their activities focused on Samenoura bay where Yoriiso is located at the Northeastern tip. Since disaster struck, K. lives in an apartment of a FSS-friend in central Ishinomaki. Even if K. is not living in Yoriiso anymore as descendant of an influential and wealthy family he felt responsible for the former fellow residents even if he has no formal post (such as village headman) and moved to urban Ishinomaki after disaster. K. was also responsible for setting up two reasonably priced vending machines near the temporary housings (kasetsu jūtaku 仮設住宅) for residents who lost their homes.

K. has tried to rebuild his own business as much as to help local residents by activating his financial and social assets. However, as we will see below, he has been facing other problems in the course of resuming his business as much as during his support activities with FSS.

# 4.3 Internal Frictions and Support

The installation of cheap vending machines by K. mentioned above caused friction among the residents, because already before March 2011 there had been other vending machines offering beverages for  $120~\Upsilon$  per item. They are run by another resident of Yoriiso whose uphill shop was not affected by the disaster. The latter complained that he would lose customers. Eventually, this problem could be settled through discussions among the residents (and within the settlement's resident assembly) by agreeing that the cheaper vending machines were intended to support those living in temporary housing.

Due to the harsh topography at the cape of Yoriiso, sites suited for a temporary housing estate were limited. They were constructed in summer 2011 at the southern border between Yoriiso and the neighboring settlement of Maeami, a little downwards of the local elementary school. In Maeami, 17 of 23 houses were destroyed by the disaster, thus most residents of the *kasetsu* – actually located in Yoriiso – were from there. The temporary housings were part of rebuilding plans to move residents away from low-lying vulnerable areas to higher ground. However, as sites suited for such plans are scarce, the municipal officials in charge of relocation had to talk with local landowners, that is, wealthy residents. Mr. D.

was one of them, a descendant of another wealthy local family who lost his house near the harbour of Yoriiso. After the disaster he temporally moved to Western Japan to his daughter's family. During the negotiations with officials he offered some of his privately owned land suited for the construction of new housing. In return he asked the municipality to provide him a preferential treatment for living in a so-called saigaijutaku (%saigaijutaku) in the urbanized area of Ishinomaki because of his refusal to move back to Yoriiso. This in turn led to another problem, because the allocation of new residents to the brand-new saigaijutaku was based on an egalitarian lottery system that did not provide for such special treatments. Eventually, D. achieved the expected outcome and is now living in a saigaijutaku.

Because of his long relationship with Yoriiso residents, the author of this paper was also active in reconstruction efforts.<sup>3</sup> By chance a group of German members of parliament met fishermen from Yoriiso. The leader of the group happened to be a board member of the German branch of a large international welfare and health organization. A few weeks after their visit an offer of about 1,000,000 € for a community house in Yoriiso was communicated via the German embassy. Again the egalitarian principles built in the municipal reconstruction plans seemed to nip any such endeavour in the bud. Why should Yoriiso be favoured to other places where community houses were needed, too? Due to lucky circumstances a leading member of FSS had supreme abilities in accounting and planning, so that things began rolling and the so called Kaiyūkan (海友館), or German House, was constructed just next to the local elementary school and opened with a ceremony on April 12, 2014. However, at this point many residents were still inhabiting the nearby kasetsu jūtaku and it was especially them who begun asking why the community house was built in advance of their resettlement to higher ground. Other critique included questions such as why the house was not built near the port which is accessible for anyone. The latter, however, came to understand the vulnerability of such an endeavour near the sea. Many residents refused to make use of the German House during the following month, yet their attitude of refusal changed in the course of two years. Today, the German House is widely accepted - also because resettlement to higher ground has now begun. It also features solar panels to produce electricity autonomously for the following reasons: first, surplus electricity is sold to the opened electricity market at fixed prices to partially cover maintenance costs of the house itself; second, the electricity can be used for cooking, film screening events or meetings as well as accommodating two to four persons; third, in case of emergency

<sup>3</sup> Since 2004, the author conducted extensive fieldwork in Yoriiso for his PhD Thesis (Wilhelm 2009). Since the disaster he visited Yoriiso more than dozen times to maintain bonds with the residents as well as to collect data for his studies.

the system provides electricity for multiple purposes. This is especially important for those in need of a power supply for their medical appliances such as lung machines.<sup>4</sup>

The next section focuses on demography and its effects on livelihood in a fisheries neighbourhood.

# 5 Population Decline and Demography

Apart from the 'damage by rumours' (fuhyō higai 風評被害; due to the alleged contamination of Sanriku's waters and thus its marine products), local residents experienced multiple problems during reconstruction, such as contested plans for building tsunami walls along the sea as well as accelerating depopulation, or problems that evolved within the global arena of foreign politics. In this chapter the latter two will be paid attention to.<sup>5</sup>

As noted before, fisheries activities were virtually impossible after tsunami struck. When looking at several districts of Ishinomaki City (table 6) we can observe that in coastal areas such as Ogatsu or Oshika the population dropped dramatically. On the other side, Kanan – a district adjunct to the urban area of Ishinomaki City with access to the Sanriku Highway, the Res Cross Hospital, and the location of a new outskirt shopping mall – experienced a population growth. We cannot simply say that the standstill of the local fisheries industry was the main reason why population declined after disaster. Other reasons are to be found in mental, economic or comfort aspects of the victims' lives after March 2011.

For instance, in 2012 a friend of the author, a stonemason craftsman from Ogatsu, told that he together with his mother had decided to move to a *kasetsu* settlement that was as far away as possible from the coast where they experienced the dramatic events. During the assignment of *kasetsu jūtaku* the authorities asked applicants if they had any locational preferences. The friend chose to stay in the Kitakami/Ogatsu district to restore his livelihood as a slate-craftsman. Other residents of Ogatsu have

- **4** Many people were evacuated to the nearby Onagawa nuclear power plant to access electricity after March 2011.
- 5 It should be noted that Yoriiso was one of three sites where plans for tsunami seawalls were dismissed. Officially, there was no need for them, but, this holds true for other places, too. In fact, it was the united effort of Yoriiso's residents who harshly opposed the plans, even if a few residents including the village headman favoured a wall at the port because it would protect their naya (納屋; store houses for fishing tools; sometimes referred to as banya 番屋) near the harbour.
- **6** In fact, there are five *kasetsu* districts in urban Ishinomaki City: West (Seibu, Hebita area), Central (Chūō, Ōhashi area), North (Hokubu, Kaisei area) and South (Tōbu, Watanoha area). The Eastern areas are Kanan, Monou/Kahoku, Kitakami/Ogatsu and Oshika.

chosen a *kasetsu jūtaku* near the urban center in Kanan or in an interior area such as Monou/Kitakami where many people from Ogatsu had been evacuated to the so-called 'Big Bang' communal sports centre immediately after the disaster.'

The depopulation of coastal areas is also visible in fisheries statistics. Graphics 7 and 8 illustrate the demographic change of the fishing population as much as the de facto residents between 2008-2013 and 2010-2015 in two fishing villages of Oshika peninsula, i.e. Yoriiso on the eastern side and Momonoura on the western side near the urban centre of Ishinomaki City.8 Both villages show a general decline in population between 2008 and 2013 and, even before March 2011 the ageing of fishermen was clearly visible. Yet, when looking at the graph of 2013, in Yoriiso the distribution of age cohorts seems much better balanced than in Momonoura where fishermen below the age of 50 are virtually nonexistent. In Yoriiso the distribution even suggests that the problem of an ageing fisheries population even worsened during the course of disaster. As far as I could hear by local fishermen, many elders refused to rebuild their business after disaster. They weren't "willing to shoulder the financial risks of resuming their fishery activities, as they will be far too old to work by the time reconstruction is finally completed and some of them lack successors in their families". (Wilhelm, Delaney 2013, 114) On the other hand, the residential data in graphic 8 illustrates that the real situation is much worse in Momonoura than in Yoriiso. Only ten percent of the pre-disaster population remained in Momonoura, while in Yoriiso only 30% left. This has severe consequences in local autonomy such as in the case of local resource management or local fishing rights allocation.

Even if there still exists a Fishery Cooperative Association in Momonoura, the statistical data shows that an effective local management is virtually impossible since March 2011. There, the local fishing rights were handed over to an external investor in the course of the introduction of

<sup>7</sup> Focussing further on the micro-migration between the eight areas after disaster seems to be worth a detailed demographic study. However, one can surely say that the population increase in Kanan after March 2011 is somehow related to the harsh decline in Ogatsu and the convenient infrastructure. According to the Population Census of 2015 Ogatsu lost three quarters of its former population. It should be noted that the suburbs of Sendai, the largest city in Tōhoku, experienced quite a growth in population and household numbers. (See: Ishinomaki-shi sōmubu sōmuka 2016)

<sup>8</sup> In Japan, the statistical data provided by authorities can vary. In our case, the author referred to the data of the Population Census (Kokusei chōsa 国勢調査), that is conducted every ten years with additional approximative data for each five years. While this data is based on the number of persons 'in place' the residential data by local municipalities refer to the official resident registration data (jūmin tōroku 住民登録) which do not always mirror the real situation. On the other hand, the demographic data of the Fishery Census is based on the number of workers in the fishery sector and hence can vary from the residential data.

Special Fishery Zones (Suisan Tokku) which goes in hand with the transfer of local resources to external stakeholders. In Yoriiso, however, local autonomy over resources could be maintained. We even see an improved environment for fishing activities due to fewer fishermen (stakeholders) accessing the same amount of resources that becomes visible in the sea squirt aquaculture which is the main type of fisheries in Yoriiso (table 7). While the total number of fishermen in Yoriiso declined after March 2011 the amount of accessible resources (rafts for cultivation) remained stable. Therefore the number of rafts per cultivator nearly doubled during the initial phase (until 2013). Simply spoken, this also means a doubling of production for each and thus a possible rise in income. However, things are not easy, especially in Yoriiso's sea squirt industry. As indicated above (section 4.2), most sea squirt (about 70% of total production; Demura 2013, 2) had been exported to South Korea before March 2011 and the initial phase for cultivating sea squirts needs more time (at least three years to become ripe for sales) compared to other species. Hundreds of customers stood in line when above mentioned group of elder volunteers (FSS) organised a PR event to sell the first sea squirts produced in Yoriiso after disaster on the streets of urban Ishinomaki on June 1st, 2014. Yet, this is just one side of the medal. In September 2013 South Korea extended their import ban of marine products from northeastern Japan due to radiation fears and thus the local sea squirt industry experienced a severe setback. The PR event represented an attempt to increase local demand, but, as the cultivation of sea squirt takes much longer time than other products it is difficult for producers to adapt to new conditions on the market. However, the PR efforts have not yet fruited and the domestic demand for sea squirt has not increased and remained at about 4,000 tonnes per annum while the total production is expected about 14,000 tonnes for 2016 of which approximately 10,000 are produced in Miyagi Prefecture alone. Waiting for a lift of Korea's import ban, the producers initially responded by freezing the remaining sea squirt, yet, since there has been no improvement in the bilateral talks the producers decided to discard a stock of 10,000 tonnes in June 2016, an amount slightly higher than the exports to Korea before March 2011. The decrease in numbers of rafts for sea squirt cultivation in Yoriiso between 2013 and 2016 in table 7 is surely related to the breakdown of the traditional hoya export market

**<sup>9</sup>** Even though parts of Oshika peninsula were obviously slightly contaminated by plumes from the wrecked reactors in Fukushima, actually, no significant radiation has been found so far in sea squirts. The import ban by South Korea is to be regarded as a tool within the arena of global politics and bilateral relations between Japan and South Korea. Therefore, it represents an interesting case to study the effects of global affairs on the reconstruction of local business in a post-disaster situation. The export of sea squirts amounted approximately 10,000 tonnes annually before disaster.

to the Korean peninsula. Hence, we see that even the local *hoya* business is at the mercy of the global political arenas.

On the other hand, in Momonoura the demographic changes that occurred after March 2011 have lead to a state of social vulnerability, i.e. it is almost impossible to resume collective fishing activities without the missing younger generations within the settlement. For a large part the latter triggered the introduction of Tokku in Momonoura, i.e. a special zone where a company (the Momonoura Collective Oyster Company; MCOC) established by external investment was installed in 2012 to provide young people with jobs with a stable income. The initial conflict during the introduction of the Tokku<sup>10</sup> until September 2013 have calmed by 2016 and it seems that this new model of fisheries reconstruction efforts can be a possible path for future developments in coastal Sanriku. At least for the fiscal year 2016 the production of MCOC increased every year since 2013 and a first profit was expected for 2016. Although the number of employees has risen from initial 15 to 43 by 2016, most of them are commuters from outside Momonoura because some essential parts of the village are still inhabitable due to uncompleted reconstruction work (Ōyama 2016, 13). Bringing back inhabitants seems to be a difficult task at Momonoura - in comparison to Yoriiso - is located in vicinity of urban Ishinomaki and therefore is easily accessible by car. It will be interesting to see if any Tokku other than in Momonoura will be introduced in 2018 when fishing rights are to be allocated for the second time after disaster.

#### 6 The Next Five Years

While it was difficult to predict future developments of the disaster-struck fisheries industry of Sanriku soon after the earthquake, major developments could be observed during the following five years.

First, the trend of depopulation in the coastal region has been boosted by disaster. However, the situation differs from place to place. In some cases, as in Yoriiso, population decline in combination with reconstruction efforts have even led to an increased resource access and thus more suitable conditions for local producers who have remained. However, due to fears of radioactive contamination, it is difficult to predict the future mar-

10 I have to omit details about the conflicts between JF Miyagi (the head organisation of FCAs) and the prefectural government in the course of creating the Tokku. Details have been discussed in Wilhelm (2013, 642-6). It should be noted, however, that there were rumours at the time of the introduction of Tokku that the deal to introduce the unpopular institution had been traded between the governor of Miyagi Prefecture and a willing friend and big player in the regional fisheries business to save the governor's face, as virtually no local fisheries association was willing to accept the introduction of this new institutional framework within their local district.

ket in fisheries especially in those sectors that had been relying on exports. Second, similar to the variety of damage, the problems faced by local residents during reconstruction varied remarkably. During the initial phase it was particularly important to provide local residents with jobs to maintain their livelihoods. Therefore, resuming fisheries was a major precondition for this. However, increased mobility and – since reconstruction took effect – a booming construction sector pulled many former fishermen to other labour than fishing. Thus, the process of depopulation in coastal areas has to be seen in connection with changing conditions on the labour market. As we have seen in the case of Yoriiso, many frictions have emerged during the reconstruction even within a community. This is

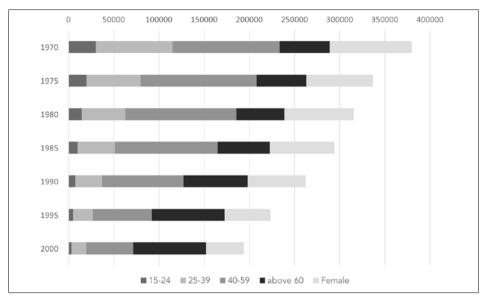
Third and last, in Miyagi Prefecture a new type of fishing rights allocation was introduced in 2013 that enabled external investors to access fishing (and cultivation) grounds that used to be in the hands of local fishermen via their FCA. It will be interesting to see if this handing over of local autonomy in fisheries management will be successful. According to Miyagi Prefecture's officials, however, there will be no new Tokku installed in September 2018, when the fisheries rights will be allocated again for the second time after disaster.

referred to as shifting states of social vulnerability.

To conclude, the situation in disaster-struck Pacific coastal communities is still severe. An often overlooked outcome of the March 2011 disaster for the local fishing industry is the loss of long-standing customers (kokyaku 顧客) that can sometimes be traced back over generations. Not just because of 'damage by rumours', but, rather due to difficulties in delivering supply products over months the partners of these traditional ties had to look for other suppliers with whom they continue business. In other cases, as we have seen in Yoriiso's ascidian aquaculture, supra-local or international frictions are complicating the reconstruction progress in coastal fisheries. Furthermore, as the amount of fisheries resources cannot be foreseen, declining catches – just like in 2017 – are a cause for headache for many local entrepreneurs who struggled hard to rebuild their business. We will have to see if Sanriku's coastal fisheries will be able to regain its predisaster power and strength.

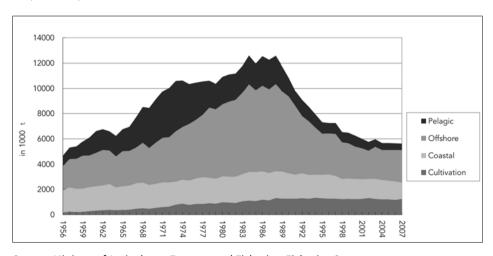
## **Appendix**

Graphic 1. Fisheries Workforce in Japan



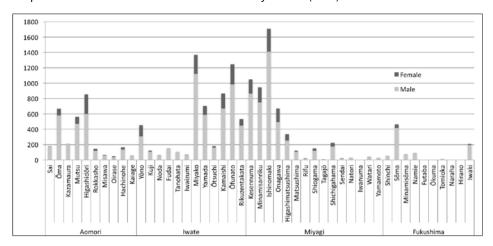
Source: Ministry of Agriculture, Forestry and Fisheries, Fisheries Census

Graphic 2. Japan's Fisheries Production (1956-2007)



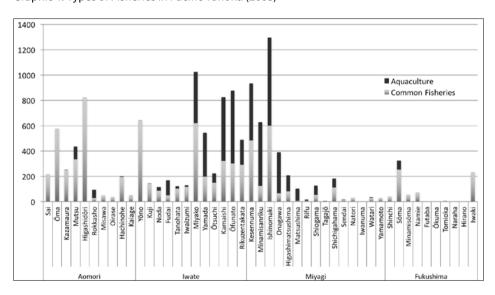
Source: Ministry of Agriculture, Forestry and Fisheries, Fisheries Census

Graphic 3. Fisheries Workforce in Pacific Tōhoku by Gender (2013)



Source: Tōhoku nōseikyoku tōkei-bu (2011) and (2017)

Graphic 4. Types of Fisheries in Pacific Tōhoku (2008)



Source: Tōhoku nōseikyoku tōkei-bu (2011)

Fukushima

| Etc. | Nori | Wakame | Kombu | Sea Squirt | Oyster | Scallop | Salmon |

Graphic 5. Cultivated Species in Pacific Tōhoku (2008)

Source: Tōhoku nōseikyoku tōkei-bu (2011)

Table 1. Density of Fishing Ports in Selected Prefectures

Prefecture	Coastline in km (A)	Number of fishing ports (B)	(A) / (B) = av. distance between ports (in km)
Hokkaidō	4,454.134	286	15.6
Nagasaki	4,189.132	282	14.9
Miyagi	827.884	143	5.8
Iwate	710.780	111	6.4

Source: Hamada (2013, 84) and Ministry for the Environment (2012)

Table 2. Fishing Vessels (May 2011)

Prefecture	Registered	Destroyed	in %
Aomori	9,672	616	6.4
Iwate	14,304	5,726	40.0
Miyagi	13,770	12,023	87.3
Fukushima	1,173	873	74.4
Sum	38,919	19,238	49.4

Source: Kahoku Shinpō (May 14, 2011)

Table 3. Damaged Facilities

Prefecture	Ports	Markets	Processing	Amount in 100 ¥ million
Aomori	18	3	57	195,000
Iwate	108 of 111	13 (all)	144 of 178	3,973,000
Miyagi	142 (all)	10 (all)	378 of 439	6,680,000
Fukushima	10 (all)	12 (all)	105 of 135	824,000

Source: Ministry of Agriculture, Forestry and Fisheries 2012, 11

Table 4. Administrative Order/Grading of Fishing Rights Assignment

Former System	Fisheries Tokku (special zone)
<ol> <li>Fishery Cooperative Association ⇒</li> <li>Juridical person of local fishermen</li> <li>Juridical person of more than seven local fishermen</li> <li>Fishermen or employee (incl. juridical persons)</li> <li>Newcomers (incl. juridical persons)</li> </ol>	1st Group  - Fishery Cooperative Association  - Juridical person of local fishermen  - Juridical person of more than seven local fishermen  2nd Group  - Fishermen or employee (incl. juridical persons)
	<ul> <li>Newcomers (incl. juridical persons)</li> </ul>

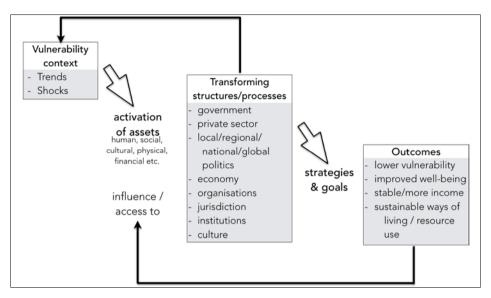
Source: Wilhelm 2013, 637 – Translated by the author

Table 5. Reconstruction Plan for Miyagi's Fishery

Restoration (3 years; 2011-2013)	Regeneration (4 years; 2014-2017)	Development (3 years; 2018-2020)
Reorganisation and temporary restoration of harbours and landing facilities Cleaning up debris Emergency measures in aquaculture Provision of vessels and gear; reinstallation of farming facilities; provision of fry Emergency measures for cooling facilities and markets Introduction of new organisational structures Resuming of scientific research institutions Adaption to situation in Fukushima Dajichi NPP	Concrete reinstallation of harbours and landing facilities Reorganisation of releasing fry Support to stabilise the fishing sector based on a reorganisation of fishing licenses and rights Consolidation of companies through mergers Improvement and development of aquaculture facilities Concrete reinstallation of markets and cooling facilities Adaption to situation in Fukushima Daiichi NPP	Support of integration of 'base harbours' and 'collection harbours' through improved infrastructure Support of local, autonomous resource management Consolidation of companies through product development Increased revival of municipal fishery areas Support of scientific fishery research Adaption to situation in Fukushima Daiichi NPP

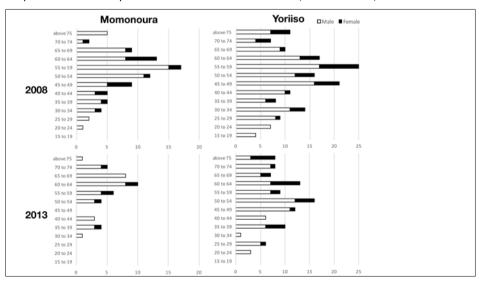
Source: Miyagi Prefecture 2011, 3

Graphic 6. Sustainable Livelihoods Framework

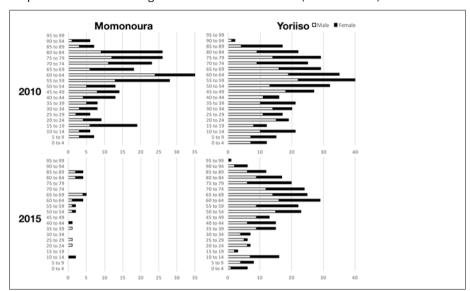


Source: Simplified and adapted scheme of Scoones 1998, 4 and DFID 1999

Graphic 7. Fisheries Population in Yoriiso and Momonoura (2008 and 2013)



Source: 12th and 13th Fisheries Census of 2008 and 2013. Tōhoku nōseikyoku tōkei-bu (2011) and Miyagi-ken shinsai fukkō kikaku-bu (2015)



Graphic 8. Residential Changes in Yoriiso and Momonoura (2010 and 2015)

Source: 12th and 13th Fisheries Census of 2008 and 2013. Tōhoku nōseikyoku tōkei-bu (2011) and Miyagi-ken shinsai fukkō kikaku-bu (2015)

Table 6. Population Change in Districts of Ishinomaki

	1995	2000	2005	2010	2015	2010>2015	2010>2015 (%)
Ishinomaki	121,208	119,818	115,588	11,2683	103,088	-9595	91%
Kahoku	14,186	13,407	12,508	11,578	11,097	-481	96%
Ogatsu	5,840	5,239	4,694	3,994	1,021	-2973	26%
Kanan	18,043	17,919	17,522	16,950	19,670	2,720	116%
Monou	8,990	8,644	8,102	7,582	7,460	-122	98%
Kitakami	4,765	4,472	4,028	3,718	2,430	-1288	65%
Oshika	5,891	5,279	4,882	4,321	2,448	-1873	57%

Source: Cabinet Office, Population Census of 2010 and 201511

Table 7. Access to Sea Squirt Cultivation Resources in Yoriiso

	Cultivators	Rafts (hoya + scallop) = SUM	Rafts per Cultivator
2011	(36-3=) 33	(95 + 29) = 135	3.8
2013	19	(75 + 32) = 107	5.6
2017	20	(75 + 29) = 104	5.2

Source: Data was kindly provided by Yoriiso's local FCA branch during fieldwork by Wilhelm

 $\textbf{11} \quad \text{Cabinet Office, Population Census of 2010 and 2015 [online]. URL $http://www.e-stat.go.jp/SG1/estat/GL02100104.do?tocd=00200521 (2017-12-25). }$ 

### **Bibliography**

- Aldrich, Daniel P.; Yasuyuki Sawada (2015). "The physical and social determinants of mortality in the March 2011 tsunami". Social Science & Medicine, 124, 66-75.
- Demura, Masaharu (2013). "Miyagi-ken ni okeru hoya-yōshoku no fukkō jōkyō" 宮城県におけるホヤ養殖の復興状況 (State of Reconstruction of Ascidian Aquaculture in Miyagi Prefecture) [online]. *Nōchūsōken zuji hasshin repōto* 農中総研 随時発信レポート (Nochuri on demand report), 1-3. URL https://www.nochuri.co.jp/genba/pdf/otr130109-2.pdf (2016-11-23)
- DFID, Department for International Development (1999). Sustainable Livelihood Guidance Sheets [online]. Section 2. 1999. London. DFID. URL http.//www.eldis.org/vfile/upload/1/document/0901/section2.pdf (2016-11-23).
- Endō, Masatoshi (1984). "Meiji-ki no gyojō kyōkai ni kansuru ichi shiryō" 明治期の漁場境界に関する一資料 (Materials Concerning the Boundary of Fishing Ground (sic) in Meiji Era). *Tōhoku chiri* 東北地理 (Geography of Tōhoku), 36(1), 69-70.
- Hamada, Takeshi (2013). *Gyogyō to shinsai* 漁業と震災 (Fisheries and Quake Disaster). Tōkyō: Misuzushobō.
- Ishinomaki-shi sōmubu sōmuka (ed.) (2016). Heisei 27-nen kokuseichōsa ni yoru Ishinomaki-shi no jinkō/setaisū 平成 27 年度国勢調査による石巻市の 人口世帯数 (Population and households of Ishinomaki City according to the Population Census of 2015). Ishinomaki: Ishinomaki-shi sōmubu
- Katayama, Satoshi (2016). "Ōtsunami-go no gyogyō, gyoson to jinkōryūshitsu" 大津波後の漁業、漁村と人口流出 (Fisheries and Fishing Villages After the Great Tsunami and the Problem of Depopulation). Tsunashima, Fujio et al. (eds.), Higashi-Nihon-daishinsai fukkō no kenshō. Donoyō ni shite, sanji-jōbin-gata fukkō'o norikoeru ka 東日本大震災復興の検証. どのようにして 「惨事便乗型復興」 を乗り越えるか (An Evaluation of Reconstruction Efforts after the Great Tōhoku Earthquake. How to Overcome a 'Reactionary Type of Recovery'). Tōkyō: Gōdō shuppan, 189-208.
- Kawanishi Hidemichi [2010] (2015). *Tōhoku. Japan's Constructed Outland*. Transl. by Nanyan Guo, International Research Center for Japanese Studies, and Raquel Hill. Leiden: Brill.
- Ministry of Agriculture, Forestry and Fisheries (2010). 2008-nen gyogyō sensasu hōkokusho 2008 年漁業センサス報告書 (Report of the 2008 Census of Fisheries) [online]. Tōkyō: Ministry of Agriculture, Forestry and Fisheries (Japan). URL http://www.maff.go.jp/j/tokei/census/fc/2008/report/index.html (2017-08-01).
- Ministry of Agriculture, Forestry and Fisheries (2011). Gyūniku, inawara kara no sokutei kisei-chi o koeru seshiumu no kenshitsu ni kansuru jōkyō ni tsuite. Dai 12-kai genshiryoku songai baishō funsō sinsakai teishutsu

- shiryō 牛肉・稲わらからの暫定規制値等を超える セシウムの検出に関する状況について (About the Situation Concerning the Detection of Cesium Exceeding Provisional Regulation Value Etc. from Rice Straw and Beef. Materials for the 12th Meeting of the Commission for the Evaluation of Reparation Payments Due to the Conflict Arising from the Nuclear Accident at Fukushima Daiichi NPP) [online]. Tōkyō: Ministry of Agriculture, Forestry and Fisheries (Japan). URL http://www.maff.go.jp/j/kanbo/joho/saigai/gyuniku\_kaigi/pdf/pl-.pdf (2018-03-13).
- Ministry of Agriculture, Forestry and Fisheries (2012). Higashi-Nihon daishinsai to nōrinsuisangyō. Kiso-tōkei dēta (zusetsu) Iwate, Miyagi, Fukushima o chūshin ni 東日本大震災と農林水産業基礎統計データ (図説) 岩手・宮城・福島を中心に (The Primary Industry Sector and the Tōhoku earthquake. Basic Statistical Data (Illustrated) with a Focus on Iwate, Miyagi and Fukushima Prefectures). Tōkyō: Ministry of Agriculture, Forestry and Fisheries. URL http://www.maff.go.jp/j/press/tokei/kikaku/111021.html (2013-08-25).
- Ministry of Agriculture, Forestry and Fisheries (2015). 2013-nen gyogyō sensasu hōkokusho 2013 年漁業センサス報告書 (Report of the 2013 Census of Fisheries). Tōkyō. Ministry of Agriculture, Forestry and Fisheries (Japan). URL http://www.maff.go.jp/j/tokei/census/fc/2013/report/index.html (2017-08-01).
- Ministry of the Environment (2012). Heisei 24-nen. Kankyō tōkei-shū 平成 24 年環境統計集 (Collected Statistics 2012) [online]. Tōkyō: Ministry of the Environment (Japan). URL https://www.env.go.jp/doc/toukei/data/11ex725.xls (2016-11-21).
- Miyagi Prefecture (ed.) (2011). *Miyagi-ken suisan fukkō puran* 宮城県水産復興プラン (Reconstruction plan for the fisheries of Miyagi Prefecture). Sendai: Miyagi Prefecture. URL http://dl.ndl.go.jp/info:ndljp/pid/6010687 (2012-08-12).
- Miyagi-ken shinsai fukkō kikaku-bu (ed.) (2015). 2013-nen (dai 13-ji) Gyogyō sensasu. Gyogyō keieitai-chōsakekka hōkokusho 2013 年 (第 13 次) 漁業センサス 漁業経営体調査結果報告書 (2013 (13th) Fisheries Census. Report on Fisheries Units (in Miyagi Prefecture)) [online]. Tōkei-ka shiryō (Tōkei-ka shiryō Statistical materials), 1375. Sendai: Miyagi Prefecture. URL https://www.pref.miyagi.jp/soshiki/toukei/gyosen-2009houkokusyo.html (2016-11-23).
- Ōyama, Katsuyuki (2016). "Kigyō intabyū, Momonoura kaki seisansha gōdō gaisha daihyō shain Ōyama Katsuyuki-shi" 企業インタビュー 桃浦かき 生産者合同会社 代表社員 大山勝幸氏 (Company interview with Ōyama Katsuyuki, representative of the Momonoura Collective Oyster Company). Shichijūshichi bijinesu jōhō 七十七ビジネス情報 [Bank Business Info], 74, July 22, 8-13.

- Scoones, Ian (1998). "Sustainable Rural Livelihoods. A Framework for Analysis". *IDS Working Paper*, 72. Brighton: Institute of Development Studies, 1-22.
- Tōhoku nōseikyoku tōkei-bu (ed.) (2011). 2008-nendo gyogyō sensasu. Tōhoku no gyogyō-kōzō 2008年漁業センサス 東北の漁業構造 (The structure of fisheries in Tōhoku as seen in the 12th Fisheries Census of 2008) [online]. Tōkyō: Ministry of Agriculture, Forestry and Fisheries. URL http://www.maff.go.jp/tohoku/stinfo/toukei/tosyo/pdf/08gyosen\_kouzou.pdf (2012-11-02).
- Tōhoku nōseikyoku tōkei-bu (ed.) (2017). Heisei 27-28 nen. Dai 63-ji Tōhoku nōrinsuisan-tōkei-nenpō 平成 27, 28 年 第 63 次東北農林水産統計 年報 (2015-2016. 63th Statistical Yearbook of Tōhoku's Agriculture, Forestry and Fisheries) [online]. Tōkyō: Ministry of Agriculture, Forestry and Fisheries. URL http://www.maff.go.jp/tohoku/stinfo/toukei/nenpo/63\_touhoku.html (2017-06-16).
- Wilhelm, Johannes [Harumi] (2009). Ressourcenmanagement in der japanischen Küstenfischerei [Dissertation]. Bonn: Rheinische Friedrich-Wilhelms-Universität Bonn, Philosophische Fakultät. Norderstedt: BoD.
- Wilhelm, Johannes (2013). "Der Wiederaufbau der Fischerei Sanrikus zwischen Sonderzonen und Fischereigenossenschaften". Blechinger-Talcott, Verena; Bruman, Christoph; Chiavacci, David (eds.), Ein neues Japan? Politischer und sozialer Wandel seit den 1990er Jahren. Monogr. no., Asiatische Studien/Etudes Asiatiques, 67(2), 625-50.
- Wilhelm, Johannes (2016). "Schools in Remote Areas of Japan. Challenges for Youth, Parents and Community". Assmann, Stephanie (ed.), Sustainability in Contemporary Rural Japan. Challenges and opportunities. Monogr. no., Routledge Studies in Asia and the Environment, 2, 19-34.
- Wilhelm, Johannes; Delaney, Alyne (2013). "No Homes, No Boats, No Rafts. Miyagi Coastal People in the Aftermath of Disaster". Gill, Tom; Steger, Brigitte; Slater, David H. (eds.), Japan Copes with Calamity. Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011. Oxford; Bern; Berlin; Bruxelles; Frankfurt a. M.; New York; Wien: Peter Lang, 99-124.

### Small-scale Fisheries in Japan

Environmental and Socio-cultural Perspectives edited by Giovanni Bulian and Yasushi Nakano

# Leadership, Ritual Power and Festival Management in a Japanese Fishing Community

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**Abstract** The article provides an anthropological overview of the critical processes of empowerment and disempowerment of ritual leaders in a small Japanese fishing community. The main topic of the paper is a winter festival that takes place during the New Year's Eve in Kamishima island (Ise Bay), whose management and celebration represent an important catalyst for local leadership, which is related to the transformation of the local institutions and to the power relations among the various local leaders.

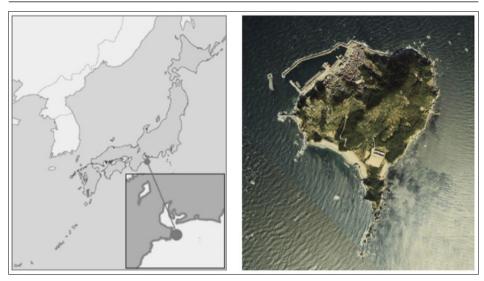
**Summary** 1 Introduction – 2 Territorial Roots and Institutional Dynamics – 3 Renegotiating Ritual Power – 4 Recontextualising a Winter Festival – 4.1 *Awa tsukuri* – 4.2 *Awa tsuki* – 5 Contextualizing Local Leadership: Conclusive Remarks

**Keywords** Festival management. Leadership. Ritual power. Japan. Fishing community. Folk religion. Anthropology of power.

#### 1 Introduction

This article provides an anthropological overview of the critical processes of empowerment and disempowerment of ritual leaders in the context of demographic and social-economic transformations of a Japanese fishing community. In particular, the article focuses on a community-based festival (matsuri 祭り), which is structured into a series of winter festive celebrations collectively called  $g\bar{e}t\bar{a}$  matsuri  $\mathcal{F}-\mathcal{F}-\mathcal{S}$ り ( $g\bar{e}t\bar{a}$  festival)¹ that take place during the period of New Year's Eve ( $sh\bar{o}gatsu$  正月) on the island of Kamishima (map 1). This festival could be considered as an example of power arena managed by two different typologies of ritual leaders who are considered powerful figures whose social prestige lie in preserving their social status, which they have gained within the local institutional systems. The article will

1 For a discussion of the meaning of the term  $'g\bar{e}t\bar{a}'$  and the religious symbolism of the  $g\bar{e}t\bar{a}$  matsuri see Hagiwara 1973; Yamada 1995; Bulian 2012.





Map 1. Geographical position of Kamishima island

Map 2. Subdivision of the three *seko* of Kamishima: (A) *higashi seko* (east neighborhood), (B) *naka seko* (center district), (C) *minami seko* (southern district). The rural settlement of Kamishima is crossed by two rivers: *mizo* and *dai mizo*, which are the geographical boundaries that separate the three *seko*: *mizo* separates *naka seko* from *higashi seko*, while the *dai mizo* divides *naka seko* from *minami seko* 



Figure 1. Rural settlement landscape of Kamishima island. The houses are mainly built in two areas: the flat land near the north coast, and on the north-west side of the main mountain slope

explore the balance of power between the  $kumiaich\bar{o}$  組合長 (director of the local fishing association) who is connected to the 'new' institutional system introduced in Kamishima (that is,  $ch\bar{o}naikai$  町内会, neighborhood associations and  $gyoky\bar{o}kumiai$  漁業組合, fishing cooperative association) and miyamochi 宮持, the head of the religious ceremonies, traditionally elected year by year by the seko セコ system (that is, the three historical local districts of Kamishima) and inkyoshu 隠居衆 (group of retired miyamochi).

The article is divided into two main topics. First of all, it will be discussed how local festive management represent an important catalyst for local leadership. As will be seen, the kumiaichō and the miyamochi can act as mirror reflecting the particular characteristics of these organisational systems, which differ mainly in two aspects: on the one hand, the seko system represent the territorial division of historical settlement of Kamishima, which is rooted into the local religious activities, including the practices of election of the miyamochi; on the other hand, chōnaikai and qyokyōkumiai, represent nowadays more efficient organizations for the needs of the local community, if compared to the 'staticity' of the traditional seko system. This radical administrative change is mainly due to the constant lack of funds for the festival celebrations which has forced the new organizations to take on the responsibility of managing funding of the religious events, including aētā matsuri, which was traditionally managed by seko system. Such institutional dualism has become more critical especially when the aging population and the consequent economic implosion forced local community groups to develop a number of strategies giving decision-making power to a single person: the kumiaichō.

Secondly, the article will discuss the ritual involvement of kumiaichō in the celebration of *qētā matsuri*. As many other New Year's Eve festivals performed in Japanese rural communities, Kamishima's aētā matsuri is not based on a single festive event but includes a series of interrelated ceremonial events, that ritually prepare the community for the new year. In particular, between December 31 and January 1, there are several religious events that represent the most important part of Kamishima's New Year's Eve.<sup>2</sup> For this peculiarity, in order to offer an ethnographic account on the relationship between the institutional change of local organizations and the increasing social visibility of the kumiaichō, in this section will be discussed two main celebrations of *qētā matsuri*: awa tsukuri アワ作り (creation of the awa) and awa tsuki アワ付き (lift of the awa). In the conclusions, the topics discussed in the previous sessions will serve to put some anthropological reflections on the question of Kamishima's leadership and its complex hybrid nature, highlighting the many political, economic and sociocultural factors that characterize the religious role played by  $kumiaich\bar{o}$  and other local leaders.

# 2 Territorial Roots and Institutional Dynamics

Kamishima is a small island located at the entrance of Ise Bay, on the border between Mie Prefecture and Aichi Prefecture. The island is about 16 km from the coast of the city of Toba, being situated at the further east point, between Toshijima and Sugashima islands, and just 4 km from Irako Cape (Atsumi Peninsula, Aichi Prefecture). Characterized by a compact and rounded shape, the mountainous territory has placed complex constraints to the urban settlement which is concentrated in a very limited space, occupying the northern side of the island, connecting longitudinally the beach with the fishing harbor. The spatial organization of the village consists of a succession of dwellings set in a complicated web of alleys and streets that connect the main buildings (shrines, temples, administrative buildings, etc.) (fig. 1).

From an administrative perspective, Kamishima is a typical municipality (Kamishima-chō) which is, since 1954, headed by the coastal town of Toba

<sup>2</sup> According to the official calendar, Kamishima shōgatsu officially begins after the exorcistic ceremony of yarimashobune ヤリマショブネ (ward off boat), which takes place on 8 December, followed by towatashi と渡し (delivery of the god) on 11 December, the shōgatsu hajime 正月始め (the beginning of New Year's Eve) on 13 December, morōmo kubari モーロモ配り (sending mandarins), awa tsukuri アワ作り (construction of awa), saba tsukuri サバ作り (costruction of saba), awa tsuki (raising awa), both performed on December 31, the namikirifudō kakeji kukaichō 波切不動掛け軸の開帳 (opening the scrolls of Namikiri Fudō), the saba tori サバ取り (saba catch) and hinata no matsuri 日向の祭 (festival of the sun) performed on 1 January, the funa matsuri 船祭り (festival of boats) the iso matsuri 磯祭 (festival of the beach) on 2 January, shishi mai 獅子舞 (lion dance) on January 4 and finally Hachiman sai 八幡祭 (festival of Hachiman) on 6 January (also called muikasai 六日祭, festival of the sixth day) (Bulian 2012).

(Mie Prefecture). Kamishima is divided into three historical districts called higashi seko 東セコ (eastern district), naka seko 中セコ (centre district) and minami seko 南セコ (southern district), and it represents, along with chōnaikai (neighborhood associations) and the local Fishing Cooperative Association (qyokyōkumiai), the main institutions of the community. The three seko, unlike chōnaikai system, administer some open spaces called tsuka ツカ (shell heap), located along the guay in front of the port of Kamishima and used for the repair and cleaning of the fish nets. The complex seko system is also characterized by an articulated internal organisational structure, which varies depending on the seko: each seko has a representative called tsuka iin 塚委員, more commonly called seko no yakuin セコの役 委員, elected together with other representatives with the task of assistants and accountants. Until about twenty years ago, every seko had its youth organization (seinendan 青年団) called, respectively, higashi shibu 東支部 (East district), naka shibu 中支部 (Centre district) and minami shibu 南支 部 (South district), and each shibu had its own headquarters where the young were performing cultural activities (Bulian 2012).

The system of *chōnaikai* was instead introduced in Kamishima before the beginning of World War II and nowadays there are four *chōnaikai*, subdivided into 25 sub-associations (*tonarigumi* 隣組) including a fifth *chōnaikai*, called 'Kamishima *chōnaikai*', which has the task of leading the local administration of the fishing community. The administrative function of these *chōnaikai* is extremely important because these 'new' organisational structures were strategically designated to adhere to the national politics of 'ideological centralization' (Sugimoto 2003, 71). That is, *chōnaikai* are moreover social institutions which are at the lowest level of Japanese administration, transmitting government or semi-governmental programs to the local communities.<sup>4</sup>

- The construction of the village of Kamishima occurred in different phases, with small villages (mura) initially settled in the North and then in a west valley on the island. These villages later became the three districts (seko) of Kamishima that constitute the current urban structure of the village. Higashi seko, for example, was called higashi mura (East village) until the early Shōwa period (1936). Later, the word was changed in higashi buraku or higashi seko. Buraku 部落 is however a term which better reflects the bureaucratic and administrative implications of the village, as that term is used in official documents of the Meiji government. After the Meiji period, buraku was also used in non-administrative contexts. However, the main difference between buraku and seko concerns precisely everyday use of the two terms: the first is mainly used for the local administration, the second reflects instead the sense of belonging of the local inhabitants to their neighbourhood.
- 4 The *chōnaikai* were one of the main objects of study in Japanese sociology, in particular urban, rural and political sociology. Despite the vastness of the studies on the subject, it is still possible to make a brief summary of the main sociological debates concerning *chōnaikai*. From 1945 to 1960, debates focused on the political characteristics of *chōnaikai* in rural areas and, in particular, on the question whether these organizations were independent or not from state governmental authorities. During this period, urban sociology, in an attempt to affirm its own academic identity, focused on the process of formation of new *chōnaikai*. The period from 1960 to 1980 was characterized by strong economic developments.

However, these new institutions are rooted in a complex historical background. In Kamishima, the traditional *seko* system and the new centralized *chōnaikai* system represent two aspects of the traditional Japanese community organization, based on the territorial configuration of the internal relations in an urbanized space: *muragumi* 村組 and *kinringumi* 近隣組 (Fukuda 1979). *Muragumi* is a term for a settlement area separate from the rest of a village, whose boundaries are drawn from a river or a road. Each village can contain a number of *muragumi* and each house can only belong to one of these. Topographical names and terms belonging to the rural architectural vocabulary are often used to indicate the *muragumi* such as, for example, cave, garden, valley or stream. *Muragumi* primarily performs also different social functions within the rural community (mutual aid and support in the daily activities of the community, cooperation for community activities, organization of religious services).

In turn, muragumi is divided into small groups called kinringumi, which have the task of carrying out a series of community work for the muraqumi management. Kinringumi is a term that indicates a particular type of neighbourhood association, which administers its own a specific area of muragumi without the direct intervention of governmental authority. The main functions assigned to kinringumi are the local administrative organization, cooperation and mutual support among its members. Moreover, the kinringumi is divided into subgroups called tonarigumi, which can carry out similar tasks to those assigned to kinringumi. The main difference between muraqumi and kinringumi consists in the fact that the first is a separate area of the village, based on a series of social relationships between residents, while the second term indicates an area of the muragumi, generally consisting of a row of houses or group, whose members perform some basic functions of local government (also called jichikai 自治会, local self-administration body). Both terms also imply the idea that the basic unit of the village is mainly the neighbourhood, which is the principle of the 'shared territory bound by an organization' (Fukuda 1979).

This brief introduction contextualizes the main organisational structures of Kamishima and highlights two important aspects of the local institutional system. First of all, local organizations are closely tied to the territorial system: the *seko* system, which corresponds to *muragumi*, and the system of *chōnaikai*, which corresponds instead to *kinringumi*. Around these two

opment in urban and rural areas and the emergence of new social issues. Urban sociology focused on the interrelations between *chōnaikai* using theories then in vogue: system theory, theory of social movements and community theory. From 1980 onwards, sociological studies focused on the revaluation of the roles of *chōnaikai* in regional areas (Masashi 1997). In anthropology, Theodor Bestor, for example, analyzed *chōnaikai* as social institutions that produce and reproduce traditionalism as a social process to support the current patterns of social organization (Bestor 1989). Iwasaki Nobuhiko focused on analyzing the role that *chōnaikai* played in environmental movements (Nobuhiko et al. 1989).

organisational systems gravitate a number of small and medium-sized organizations, which perform simple tasks (road maintenance, grass cutting, etc.), or more complex tasks (organization of fire brigades, the Association of pensioners, the Association of women, the parent-teacher Association, the Association of students, etc). Interestingly, the *chōnaikai* system in Kamishima has not an exact geographical correspondence within the community: if the boundaries of *seko* are mainly driven by geographical features, the four *chōnaikai* are distributed in such a way that members belonging to the same *chōnaikai* can also be resident in two different *seko* (Bulian 2012).

It is also important to note that the muraqumi and kinringumi systems are two systems that have two different institutional roles not only from an administrative point of view. Place-based institution assume their importance not only for the frequency they are used, but also for the intensity of the arousal they cause. As seen through the schematization of the main traditional institutions proposed by Fukuda (1979), the Kamishima community is thus constituted by a set of smaller communities and bounded by geographical boundaries. Even from a linguistic point of view, if we look at the etymology of the term seko we note that it indicates the boundary of some rural or urban settlement: according to the Kokugo Daijiten (Dictionary of the National Language) seko means 'side road or narrow passage',5 while in Kadokawa Nihon Chimei Daijiten (Geographical Dictionary of Japan Kadokawa 1991) indicates an 'out-of-the-way' or 'a part of the city or village'. If on one hand, seko is therefore a 'community within a larger community', defined according to specific geographical and institutional boundaries, on the other hand, it is also an example of a community defined according to certain symbolic boundaries which, "encapsulate the identity of the community and, like the identity of an individual, is called into being by the exigencies of social interaction" (Cohen 1965, 13). It is no coincidence that the folklorist Wakamori Tarō used the expression 'seko spirit' to indicate a sense of 'rivalry' among the various seko members (1964). This expression also indicates how the system of the seko constitutes a set of cultural values so deeply rooted in individual identity that one may say that the inhabitants of Kamishima are not related to their own community but to their own seko.

Finally, another important difference between *seko* and *chōnaikai*, is that the *seko* system represents the spatial orientation that characterizes the main religious practices of this community. For example, there is a small shrine dedicated to Aragamisama 荒神様 (a *kami* protector of the

**<sup>5</sup>** See *Nihon Kokugo Daijiten* (2001). 『日本国語大辞典』 (Dictionary Of National Japanese Language). vol. 7. Tōkyō: Shogakkan, 576.

<sup>6</sup> The term *seko* is also used in another village, Kō Ago, while the term *sekonomi* セコノミ is used in the village of Kohama, both under the Toba administration (Wakamori 1965).

seko) in each seko, while chōnaikai have instead no place for religious practice remaining, on the organisational level, simple 'institutional inventions'. In this cultural context, it can be said that the religious practices that take place in the seko are therefore part of a 'theology of the territory'. As we shall see later, Kamishima's New Year's celebration is mainly based on this territorial configuration, determining specific cultural norms and ritual practices which are connected to miyamochi.

## 3 Renegotiating Ritual Power

While, on the one hand, the urban settlement of Kamishima community is structured according to specific cultural and geographical factors, on the other hand, the management of these institutes has undergone radical transformations in recent decades, influencing strongly the local policies. In particular, the question of the economic management of community religious ceremonies has undergone critical changes in the organisational and administrative level.

The religious organization of Kamishima falls under the category of so-called 'tōya community', and the local term miyamochi refers to a 'person in charge' ( $tōya ext{ } ext{ }$ 

- 1. The *miyamochi* must belong to a wealthy family of the community. This condition was important because the role of *miyamochi* consisted in financially supporting all New Year's Eve ceremonies.
- 2. The new *miyamochi* must be married and have two generations of descendants. This condition requires that the *miyamochi* and his wife should have reached the age of sixty, although the age threshold has been recently brought to seventy years.
- 3. According to the religious prescriptions of the Shintō tradition, the miyamochi family must not be ritually unclean, but must constantly maintain a state of purity. It follows that the miyamochi and his family will have to keep away from the graveyard and the places of mourning or childbirth. In the past, in the case of mourning in his family, the miyamochi was purified with water on the 1st, 15th and 28th of each month in the public baths of Kamishima. This custom, though of extreme importance, has fallen into disuse towards the end of the last century.

In addition to these three conditions, in the past the *miyamochi* was traditionally chosen according to the *seko* of origin using a turnaround system (Hotta 1970; Hagiwara 1973; Itō 1992, 513), while nowadays the

selection criteria for the new *miyamochi* are based solely on the age of the candidate. From a strictly economical point of view, the *miyamochi* is supported now by the local Fishing Cooperative, thus freeing him from economic burdens, but also by depreciating his social status and ritual power within the community.

Fishing Cooperative's contributions have only come in recent times when the Kamishima Fishing Cooperative merged with the Toba-Isobe Corporation in 2002.7 With the new organisational restructuring, Kamishima's corporate association was able to guarantee and manage a greater flow of money to finance New Year's religious ceremonies. Within this new institutional setting, the 'lay' figure of the  $kumiaich\bar{o}$  (director of Kamishima Fishing Cooperative) has begun to play an increasingly strategic role.8 The position of the  $kumiaich\bar{o}$  is considered prestigious in Kamishima playing also a key role in choosing the new miyamochi. In fact, the selection of the new miyamochi is organized on June 11: the  $kumiaich\bar{o}$  along with the  $ch\bar{o}naikaich\bar{o}$  (the director of the neighbourhood association) goes to the candidate's home to ask him formally if he wants to become the new miyamochi. It is generally considered a decisive moment, because becoming a miyamochi triggers the social mechanisms involved in the candidate's family sphere, according to which the candidate can not refuse.

After choosing the new *miyamochi* (who will formally be entrusted during a religious ceremony on December 11th), the *kumiaichō* organizes a banquet after the conclusion of the religious ceremonies of *isomatsuri* 磯 祭り (beach festival) $^9$  and *gokuage* ゴクアゲ.  $^{10}$  After completing his annual role, the *miyamochi* then passes the charge to the new *miyamochi* during a handover ceremony, where the ex-*miyamochi* gives to the new *miyamochi* 

- 7 Until 1948, the Kamishima Cooperative was one of the many *gyogyōkai* 漁業会, or 'fishing society' created by the amendment of the Fishing Act of 1901. In 1949, with the entry into force of the new Fisheries Act (and in particular the *Kamishima-chō gyogyōkai* 神島町漁業 became *Kamishimachō gyogyōkumiai* 神島町漁業組合, 'Kamishima Fish Cooperative Association'. In 2002, 22 cooperatives located in Toba and Isobe area merged to create the Toba-Isobe Fishing Cooperative (*Tobashi-Isobeshi gyogyōkyōdōkumiai* 鳥羽磯部漁業協同組合). The Kamishima Fishing Cooperative Association became part of the new institutional organ in the same year, becoming *Kamishimachō Toba-Isobe gyogyōkyōdōkumiai* 神島町鳥羽磯部漁業協同組合 (Fishing Cooperative Association Toba-Isobe Section Kamishima).
- 8 After the merger of the co-operative with Tobashi-Isobe, the  $kumiaich\bar{o}$  became  $shitench\bar{o}$  支店長, that is, the director responsible for the Kamishima cooperative section, but since the co-operation of the cooperative and the consequent change of roles occurred in too recent times, the inhabitants of Kamishima continue to call him  $kumiaich\bar{o}$  as a sign of respect
- **9** *Isomatsuri* is an important event for the community because it involves men and women working in fishing, and because, on a symbolic level, this ceremony is aimed at the ritual purification of the island. During the ceremony of the *isomatsuri* fishing boats circumnavigate the island of Kamishima, crossing some uninhabited islands.
- 10 Gokuage is a religious ceremony that consisted in the ritual exchange of gifts (abalones and rice cakes) between miyamochi and ama fishers.

a box, a symbol of his ritual power, containing a hung scroll (kakejiku 掛け軸) bearing the inscription 'Watatsumi Ōmikami', the name of the guardian of the sanctuary Yatsushirō. Once the ceremony is completed, the former miyamochi becomes officially the kuchimai no jii 米口の爺 (the elder of kuchimai).<sup>11</sup>

After the annual role of the  $kuchimai\ no\ jii$  has been completed, the former miyamochi becomes part of the  $inkyosh\bar{u}$  隱居衆 (group of retreats), the group to which all the former miyamochi have completed the two-year ritual process (see also Takeuchi 1952; Chang 1970; Davis 1977; Sekizawa 2000). The term inkyo 隱居 in the Japanese language means 'retired person', but in Kamishima this word indicates a major responsibility within the community, since inkyo must play a role of mediator in internal conflicts or attend ceremonial events. The status of belonging to the  $inkyosh\bar{u}$  is considered of great importance and the ceremony that sanctions the definitive admission of the former miyamochi to the  $inkyosh\bar{u}$  is called  $inkyonari\ no\ oiwai$  隱居なりのお祝い (celebration of retirement). To become thus inkyo, the  $kuchimae\ no\ jii$  must then arrange the  $inkyonari\ no\ iwai$  by choosing one day before May 20, and set up a banquet where all the members of the  $inkyosh\bar{u}$  are invited.

In this context, the active presence of the  $kumiaich\bar{o}$  (and in many other cases the  $ch\bar{o}naikaich\bar{o}$ ) has become more and more strategic with his progressive involvement in organizing community religious events and, above all, in the negotiation practices of the role of the miyamochi with the candidates, a task that in the past belonged exclusively to the organizations of the seko system. In many cases, the  $kumiaich\bar{o}$  also carries out the task of  $chonaikaich\bar{o}$ ,  $rojinkaich\bar{o}$  (Director of the Association of Retirees) and priest of the Yatsushir $\bar{o}$  Shrine (the main Shint $\bar{o}$  shrine of Kamishima) and this overlap of institutional tasks in a single person becomes therefore an example of centralization of political and ritual power. In the next section, some New Year's religious ceremonies will be examined, in which the director's involvement in ritual practices represents a means to legitimize his authority but also to 'build' it.

11 In the past, kuchimai was a tax for the village and kuchimai no jii controlled this tax together with the  $sanninsh\bar{u}$  三人衆 (three people), who were elected as representatives of the three seko. The  $sanninsh\bar{u}$  and the kuchimai no jii paid the tax and collected the money from the families of the village. The role played by  $sanninsh\bar{u}$  and kuchimai no jii was very important within the fishing industry, but with the disappearance of this charge, kuchimai no jii is now limited to attend the end-year ceremonies and visit the shrine of Ise Jing $\bar{u}$  in the city of Ise to propose good fishing and dedicate an ema k (votive tablet) to the Kamishima Fishing Cooperative Association at the Yatsushirō shrine. In the following year the kuchimai no jii become then the comairi no coma

# 4 Recontextualizing a Winter Festival

As seen in the previous section, the involvement of the  $kumiaich\bar{o}$  in the election of the new miyamochi has highlighted the new dynamics of economic, political and ritual power within the Kamishima community. In this section, the role played by the  $kumiaich\bar{o}$  will be examined in the context of the festive celebrations of New Year's Eve in Kamishima. In particular, a brief ethnographic description of two important ceremonies will be proposed: the awa tsukuri ceremony (the awa construction) and the awa tsuki ceremony (lifting of the awa). In addition to highlighting the ritual role played by the  $kumiaich\bar{o}$ , these ceremonies also represent two key examples to understand the importance of the roles played by the main ritual actors involved in the organization and performance activities.

#### 4.1 Awa tsukuri

December 31, 2008

In the late afternoon, all the men of the community, accompanied by the relatives of the new miyamochi, go to the Fishing Cooperative's head-quarters to celebrate the  $awa\ tsukuri$ , a ceremony in which they build a huge circle (awa) made of twisted  $gumi\ \mathcal{I} \lesssim$  (oleaster) and wrapped with sheets of white paper. Although in the past the construction of the awa was a task that was solely for the relatives of the miyamochi, due to the demographic and population aging problems, the members of the various  $ch\bar{o}naikai$  started to participate. During the afternoon some relatives of the miyamochi distribute to all the families of the community a leaflet containing all the information, timetables and procedures to be followed for the celebration of the  $awa\ tsukuri$ . The leaflet is prepared yearly by

12 Up to about 50 years ago, awa was prepared in the miyamochi's house, but the place was changed 30 years ago because of the excessive costs of the ceremonial banquet. The dates shown are however indicative, as I found some inconsistencies with respect to the year in which this change occurred. Hitoshi Yamada reports that the construction of the awa was made at the miyamochi's home. It is therefore possible to believe that there is some degree of discontinuity and that in some cases miyamochi decided to celebrate the awa tsukuri in his home; see Yamada 1995, 14. The choice of changing place was initially opposed by the same members of the Fishing Cooperative: since, in any case, miyamochi had to celebrate a banquet in his home after the end of the awa tsukuri, it was considered useless to move the site of the construction of the awa to stem costs. However, an agreement was reached: the building for the celebration of the awa tsukuri became the second floor of the Fishing Cooperative, while the main religious celebrations, including the banquet and the consecration of the awa, remained in the miyamochi's house. Just to overcome the problem of being able to contain as many people as possible during the celebration of the awa tsukuri, the second floor of the Fishing Copperative thus became the ideal place.





Figure 2. The awa tsukuri ceremony. At the bottom, from the left: the  $kumiaich\bar{o}$ , the kuchimae no jii, the miyamochi and his wife and the  $chonaikaich\bar{o}$  (Kamishima, December 31, 2008)

Figure 3. Preparation of the saba (Kamishima, December 31, 2008)

the Kamishima  $ch\bar{o}naikai$  (Kamishima Neighborhood Association) with the collaboration of the management of the local Fish Cooperative. The material used during the awa tsukuri is prepared a few weeks before: the new miyamochi, accompanied by his relatives and some members of the Fish Cooperative Association, goes to the mountain behind the Gori beach to cut rubber branches (Elaeagnus multiflora), chosen on the basis of their natural curvature. A few days before the celebration of the awa tsukuri some men go to the beach to cut bamboo  $medake \not> \not > \not > r$  (Pleioblastus simonii) used for the ceremony of the awa tsuki. Once cut, the medake is then adorned on the tip with zigzag strips of white paper (shide) and placed in front of the home entrance.  $^{13}$ 

The place where the *awa tsukuri* takes place is prepared during the afternoon: desks and chairs and other material left in storage are stacked in the corners of the room while on the walls of the room is hanging a long white and red striped canvas and adorned with the *shimenawa* しめ縄 (sacred rope) to sacralize the area. In the middle of the room is stretched a huge blue canvas above which straw mats and tools are arranged. On one side of the room is placed the *tokonoma*, where are hanged some scrolls depicting the *kami* of the sun Amaterasu Ōmikami, the *kami* of the sea Watatsumi Ōkami 綿津見大神 and the *kami* of the war Hachiman 八幡. *Sake*, cakes and some straw lanterns are placed in front of the scrolls as a sign of offer.

Before the ceremony begins, the kannushi performs a ritual of purification of the room and participants, singing some norito 祝詞 prayers. After the ritual purification, the eldest son of miyamochi offers a cup of sake to the miyamochi, then to his wife, to the kuchimai no jii, and finally to all the participants of the ceremony. The construction of the awa begins with a first arrangement of the gumi branches, which are tightened together with strings (fig. 2). This operation is done several times, until the structure of the awa reaches a certain degree of stability. During this initial phase, participants call the awa with the term 'without meat'. The awa is then lifted up to several times and 'compressed' by the participants, who push the ring to prove its stability. Leaning on four wooden slats, the awa is then tied with straw lanyards, wrapping it completely. Once the awa is completed, the  $kumiaich\bar{o}$  binds a purified cord to a part of the awa, symbolizing the head of the awa (awa no atama  $\mathcal{T}\mathcal{D}\mathcal{O}$  $\overline{\mathfrak{g}}$ ).

The ceremony called saba tsukuri サバ作り (construction of the saba)

<sup>13</sup> The amount of bamboo owned by each family depends on the number of components: in addition to the head of household, only male children have the right to own a bamboo cane to be used for the ceremony of the *wa tsuki*. Along with *gumi* and *medake*, straw strings are woven in the summer by some relatives of the *miyamochi* and used to tie *gumi* and white paper together. Moreover, the *awa* requires a large amount of strings so that the tires are bonded together sufficiently stable for their transport.





Figure 4. The *awa* placed in front of the *tokonoma* of the *miyamochi*'s home (Kamishima, December 31, 2008)

Figure 5. The *awa* is lifted in fornt of the main entrance of the sanctuary Yatsushirō (Kamishima, January 1, 2009)

is held simultaneously in the same hall during the celebration of the awa tsukuri, whose preparations begin a few weeks earlier. On December 13, some men go to Benten Mountain, near Bentenzaki (Cape Benten) to cut a piece of wood (saba), which is delivered to the new miyamochi. The saba's carving is a task that is entrusted to the  $\bar{o}daiku \ \pm \pm \bot$  (great carpenter), a carpenter who has built the miyamochi's house and he is in close relationship with the miyamochi and his family. The  $\bar{o}daiku$  carves the saba with twelve facets representing the months of the year (fig. 3). Once the saba is completed, the  $kumiaich\bar{o}$  writes the kanji of  $ue \pm$  (above) on the sheet and puts it back on the tokonoma. The saba is then handed over to the miyamochi who will guard it until the celebration of the saba tori.

#### 4.2 Awa tsuki

- 14 Also called *takaramono* 宝物 (treasure), *saba* is a piece of carved wood depicting a charm amulet. There is another object called *saba* in Kamishima. During the *Hachimansai* (Hachiman festival), which takes place on January 6th, boiled rice shaped like fish is prepared on a tray. The dish and the white sheet on which they are served are also called *saba*. In the Japanese language *saba* means 'mackerel' (*Scomber scombrus*) and in the past it designated the main species of fish caught in Kamishima. Boiled rice was therefore a form of prayer to wish for a good fishing of mackerel (Hotta 1970). It is interesting to note that the term *saba* also indicates the rice offered to the *gaki* (the souls of the dead without peace) and to Kishimojin 鬼子母神, the *kami* of childbirth and children.
- 15 Thirty or thirty one incisions are made on each face to indicate the days of the month, after which the saba is wrapped in white paper and bound with red and white wires. In some cases, on the decision of the  $\bar{o}daiku$ , the saba facets are reduced to six or eight, to simplify the carving operation and to tighten the working times. If the saba is reduced to six sides, the  $\bar{o}daiku$ , after completing all the engravings, vertically divides each face with a further engraving.



Figure 6. The lift of the *awa* during the climax of the *awa* tsuki ceremony (Kamishima, January 1, 2009)

When the visit of nanadohan is over, a group of young people come to the house of miyamochi to take the awa and carry it on to the Suzu beach, located north-east of the village, to celebrate the awa tsuki. The procession led by the miyamochi is firstly directed towards the main entrance of the Yatsushirō shrine. On the way, at regular intervals, the awa is lifted upright under the shouts of encouragement of participants (fig. 5). Before arriving to the great torii (Shintō portal) of Yatsushirō Shrine, the awa is again raised, while the procession awaits the arrival of negisan (local term for kannushi, the Shintō priest). The awa is then 'compressed' again by the group, performing an action similar to that which took place during the celebration of the awa tsukuri. The procession then heads on higashi seko, where the awa is 'compressed' again and raised. Later the procession moves towards a narrow alley in higashi seko, where another group

of young people intermarried with the *kuchimai no jii* expects to carry on the *awa* to the Suzu beach.

Residents of *higashi seko* and *naka seko* await on the beach the arrival of the procession to start a simulated combat against *minami seko* residents, using the long *medake* bamboo poles adorned with strips of white paper which symbolize the swords. The group led by the *kuchimai no jii* then pushes the *awa* in the middle of the battle where it is repeatedly hit with the bamboo. After the conclusion of this first phase of the ceremony, the *awa* is transported to *minami seko* to pay tribute to the *tsuka* and finally the *awa* is carried on the beach for the last phase of the ceremony. At dawn, all the participants raise the *awa* using long bamboo rods to make it float as high as possible. The *awa tsuki* lasts only a few minutes, although there is an effort on the part of all participants to raise it as high as possible in order to propitiate a good catch in the New Year (fig. 6).

When the awa finally touches the ground, the group led by kuchimai no jii carries the awa to the Yatsushirō shrine, to place it in front of the main building. While awa is transported on top of the Yatsushirō, a small group of people gather on the Suzu beach to celebrate the saba tori (catching the saba). The miyamochi delivers the saba (the piece of wood prepared during the celebration of awa tsukuri) to the kumiaichō to launch it into the group. The celebration of the saba tori consists in the attempt of the participants to take the saba in order to ensure good luck in the new year (for this reason it is also called saba takara #/ $$\frac{1}{3}$$ , 'saba treasure'). Although competition lasts only a few minutes, attempts to catch the saba push participants to behave in a violent and aggressive way. The man who succeeds then cries totta  $$\Re$  (taken), and runs up the staircase leading to Yatsushirō shrine, to place the saba in front of the awa, as a ritual qesture of good wish for the New Year.

# 5 Contextualizing Local Leadership: Conclusive Remarks

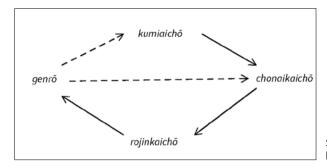
This article has taken into account the need to rethink power relations among members of a fishing community and its contribution can be identified in the description and interpretation of the role of local organizations and their main representatives within the New Year's Eve celebrations. Starting from the assumption that the  $g\bar{e}t\bar{a}$  matsuri could ideally represent a 'total social phenomenon', according to the conception inaugurated by Marcel Mauss and widely shared by most anthropologists, this series of religious ceremonies embraces a whole series of topics related to socioeconomic complexity of the celebrant community and the transformation of the local political and administrative organization. The  $g\bar{e}t\bar{a}$  matsuri reflects in fact the classical conception of the modus operandi of the ritual actors immersed in a certain social context and the strategies adopted

by local fishermen to come to terms with the transformations that have occurred inside of their community. As seen before, the complexity of the  $g\bar{e}t\bar{a}$  matsuri is also loaded with particular thematic connotations that give it not only an historical-religious autonomy, but this festival also sheds light, on a symbolic level, issues related to the power relations of the local ritual leaders and, in particular, the issue of local leadership.

Regarding the last topic, some conclusive reflections on the concept of local leadership must also be delineated and contextualized. Local leadership is generally defined as a concept that must be understood contextually, occurring within a given local configuration of power, authority, social prestige shaped by local institutions with specific economic or political goals. In the context of Kamishima, the question of local leadership is of particular interest: it implies an anthropological insight into the social dynamics and internal equilibrium of this community. More specifically, local leadership is considered to be a particular form of social relationship that takes shape within a precise context, such as a fishing community, which requires socially accepted behavioural choices in order to create a strategical policy of general consensus. Local leadership is therefore interpreted as a process of influence produced by the combination of three critical factors: the power position of the leader (in this case, the  $kumiaich\bar{o}$ ), the nature of his task and the interpersonal relationships between the leader and the components of the groups (fishing associations, religious groups, etc.), which motivates a conforming group behaviour.

Local leadership must therefore be understood as a dynamic process that takes into account the skills of the leader and his collaborators in achieving specific objectives and such characteristic is particularly relevant in the context of this fishing community, since critical economic factors such as local economy (fishery management), geography (insularity) or demography (ageing population) are crucial in conditioning local welfare and require particular managerial skills (Bulian 2012). More specifically, local leadership in Kamishima is an example of transactional or transformational leadership (Burns 1978; Davies 2009, 2011), in which a leader through a variety of social mechanisms operates with the members of his community to identify needed changes and achieve benefits. According to Bass (1999, 11; cited also in Davies 2011, 62) transformational leadership is a style of leadership where: "the leader moves the followers beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration. It elevates the follower's level of maturity and ideals as well as concerns for achievement, self-actualization, and the wellbeing of others, the organization, and society" (Bass 1999, 11).

Returning to the central theme of the article, in order to understand the theoretical background of the relationship between local leadership and rural festival management, it may be useful also to resume Davies's



Scheme 1. The "circular leadership" of Kamishima

reflections on the role of transformational leadership in an Australian rural festival management:

identifying and measuring the benefits (and costs) of festivals to rural communities is not as simple as subtracting the net investment capital from the net participant expenditure. Festivals catalyse social networking, capacity building and entrepreneurial capacities. Benefits are not just achieved during the period of the festival itself, but also through the organisation process. [...] Transformational leaders exhibit behaviour that make followers aware of the importance of their involvement in tasks, activate followers' higher-order needs and encourage them to move beyond self-interests for the sake of the wider community. (2011, 60-1; see also Podsakoff et al. 1990)

Interestingly, transformational leadership in Kamishima is characterized by a number of factors that give it a certain political and cultural identity. These factors, which are all related to each other, can be summarized as follows: a) local leadership is a sort of 'circular leadership'; b) local leadership is indirectly influenced by the community of elders ( $genr\bar{o}$  元老); c) the modalities to obtain leadership in Kamishima are based on the economic and political history of the community.

With regard to the first point, Kamishima's leadership can be defined as a 'circular leadership', as the most important institutional roles of the community follow a sort of circular pattern: generally, the one who is appointed as the new director of the Kamishima Fishing Cooperative Association (kumiaichō), then becomes chonaikaichō (head of the chonaikai) and, when his role is concluded, he subsequently becomes the head of the Kamishima Elders's Association (rojinkaichō). Such power arena sheds light on how this fishing community accepts its leaders by following a certain meritocratic system. At the same time, local leadership is influenced

by the old members of the community, collectively called  $genr\bar{o}$ . Both the  $chonaikaich\bar{o}$  and  $kumiaich\bar{o}$  are under their influence, who acts indirectly on the politics adopted by the  $kumiaich\bar{o}$ . As seen before, the question of seniority is an important factor which is also emphasized in the local religious tradition (see, for example, the ritual role of the miyamochi and inkyoshu). It follows that the sphere of influence of the  $genr\bar{o}$  on local leadership completes this circular pattern (see Scheme 1) by highlighting how the transformational leadership of Kamishima operates through different formal and informal channels that do not exclude themselves.

One last factor, which distinguishes Kamishima's transformational leadership, is its connection with the local political culture centred on the kinship relationships, which historically deepen their roots in a consolidated economic and social structure. Until the middle of the Meiji period (1868-1912) the organization of the Kamishima community was based on the  $\bar{o}moto$   $\pm \pi$  system, who held the monopoly of almost all the economic activities of the community and owned about one-third of the farmland. The koesaki 肥先き system (the ōmoto families provided the fields in exchange for manoeuvring) and the marine product processing represented the main proto-capitalist systems of work organization through which the ōmoto exercised their leadership within the community. In 1893, Kamishima gyogyōkai 神漁業会 (Kamishima Fishing Company) was founded, at the initiative of the modernization of the fishing industry launched by the Meiji Government. With the establishment of Kamishima qyoqyōkai the economic activities related to the transport of marine products were taken away from the omoto families and entrusted with the administration of Kamishima gyogyōkai. In 1902 (one year after the promulgation of the First Fishing Law), the fishing grounds, formerly the exclusive monopoly of the omoto families, were entrusted to the new organization, thus leading to the decline in the leadership of the omoto families. However, the omoto families, though they have lost their economic prestige, still continue to maintain a certain social role in the community, carrying out some important tasks. What is to important to note is that the election of the new kumiaichō is that the way the new kumiaichō is elected is also based on the candidate's lineage, although this is not the determining factor for his election.

### **Bibliography**

- Appadurai, Arjun (1995). "The Production of Locality". Fardon, Richard (ed.), Counterworks: Managing the Diversity of Knowledge. London: Routledge, 204-25.
- Aoyama Hiroshi (1994). "Tenryū ringyōchi kara no hōkoku 「天竜林業地からの報告」" (Report from Tenryū Forestry Area). Sanson Keizai; Kenkyūsho (ed.) (1994). Sanson ga kowareru sono mae ni 『山村が壊れるその前に』 (Before mountain village breaks). Tōkyō: Nihon Keisai Hyōronsha, 45-96.
- Arensberg, Conrad (1961). "The Community as Object and as Sample". *American Anthropologist*, 63(3), 241-64.
- Ashkenazi, Michael (1991). "Traditional Small Group Organization and Cultural Modeling in Modern Japan". *Human Organization*, 50, 385-92.
- Ashkenazi, Michael (1993). *Matsuri: Festivals of a Japanese Town*. Honolulu: University of Hawaii Press.
- Baldacchino, Godfrey; Niles, Daniel (eds.) (2011). *Island Futures Conservation and Development Across the Asia-Pacific Region*. New York: Springer.
- Bass, M. Bernard (1990). *Handbook of Leadership: Theory, Research and Managerial Applications*. New York: The Free Press.
- Bass, M. Bernard (1999). "Two Decades of Research and Development in Transformational Leadership". European Journal of Work and Organizational Psychology, 8, 9-32.
- Bestor C., Theodore (1989). *Neighbourhood Tokyo*. Stanford: Stanford University Press.
- Bulian, Giovanni (2012). Periferie del sacro. Il Capodanno in una comunità di mare del Giappone. Milano: Unicopli.
- Burns, J. MacGregor (1978). Leadership. New York: Harper & Row.
- Chang, Kenne (1970). "The Inkyo System in Southwestern Japan: Its Functional Utility in the Household Setting". *Ethnology*, 9(4), 342-57.
- Cohen, Anthony [1985] (2007). *The Symbolic Construction of Community*. London; New York: Routledge.
- Davies, Amanda (2009). "Understanding Local Leadership in Building the Capacity of Rural Communities in Australia". *Geographical Research*, 47, 380-9.
- Davies, Amanda (2011). "Local Leadership and Rural Renewal through Festival Fun. The Case of SnowFest". Gibson, Chris; Connell, John (eds.), Festival Places Revitalising Rural Australia. Bristol: Channel View Publications, 61-73.
- Davis, Winston (1977). "The Miyaza and the Fisherman. Ritual Status in Coastal Villages of Wakayama Prefectue". *Asian Folklore Studies*, 36, 3-29.
- Fukuda, Ajio (1979). *Nihon sonraku no minzoku teki kōzō* 『日本村落の民俗 的構造』 (Folk Structure of Japanese Villages). Tōkyō: Kōbundō.

- Gamō, Masao (1979). "Nihon no ie to mura 「日本の家と村」" (Japanese Houses and Villages). *Sekai no minzoku 13: Higashi Ajia* 『世界の民族 13 東アジア』 (Ethnic groups of the world, 13: East Asia). Tōkyō: Heibonsha.
- Hagiwara, Noriko (1973). Kamishima 『神島』. Tōkyō: Ibasaki shoten.
- Hotta, Yoshio (1970). *Mieken no shōgatsu no kyōji* 「三重県の正月の行事」 (New Year Events in Mie Prefecture). *Shōgatsu no kyōoji 3·Tokushimaken·Mieken* 『正月の行事3・徳島県・三重県』 (New Year's Event 3, Tokushima, Mie Prefecture). Mukei no minzokushishiryōkan 13, Bunkazaihogobu.
- Hüsken, Ute; Brosius Christiane (eds.) (2010). *Ritual Matters: Dynamic Dimensions in Practice*. London; New York: Routledge.
- Imai, Naoko (1983). *Minzoku·1 Nenjūgyōji* 「(民俗·1) 年中行事」 (Folklore, 1, annual event). *Anōtsu* 『安濃波』 22, Tobashi Kamishimachō chōsa hōkō tokushū, Mieken tatesu kōtōgakkō kyōdo kenkyū.
- Itō, Takashi (1992). "Gētāsai aru Kamishima-chō-Shima ni ikiru Hashimoto Tatsuoshi ni kiku 「ゲーター祭のある神島町一島に生きる橋本達夫氏に聞く」" (Listen to Mr. Tatsuo Hashimoto Living in the Island. *Gētā* Festival of Kamishima). *Umi yo rettō bunka 8·Ise to Kumano no umi* 『海の列島文化8・伊勢と熊野の海』 (Seaside archipelago culture, 8, Ise and the sea of Kumano). Tōkyō: Shogakukan.
- Kadokawa shoten (1991). *Kadokawa Nihon chimei dai jiten* 『角川日本地名大辞典』 (*Kadokawa Geographical Dictionary of Japan*). Vol. 24. Mieken: Kadokawa shoten.
- King, Russel (1993). "The Geographical Fascination of Islands". Lockhart, Douglas G.; Drakakis Smith, David; Schembri, John (eds.), *The Development Process in Small Island States*. London: Routledge, 13-37.
- Kuwahara, Sueo (2012). "The Development of Small Islands in Japan. A Historical Perspective". *Journal of Marine and Island Cultures*, 1(1), 38-45.
- Masashi, Kasuga (1997). Chikusoshiki (chōnaikai-burakukai) kenkyū no keifu to genjō: tokuni kuchisoshiki no seijiteki yakuwari wo megutte 「地区組織(町内会・部落会)研 究の系譜と現状: 特に地区組織の政治的役割をめぐって」 (Study of Genealogy and Current Status of District Organization [Neighbourhood Association/Burakukai). Especially About the Political Role of District Organization]). Keieijōhō kenkyū: Setsunan daigaku keieijūhō gakubu ronshū 『経営情報研究(摂南大学経営情報学部論集)』 (Management Information Study [Senan University Management Information Studies]), 5, 165-210.
- Matanle, Peter; Rausch, Anthony; Shrinking Regions Research Group (2011). *Japan's Shrinking Regions in the 21st Century. Contemporary Responses to Depopulation and Socioeconomic Decline*. Amherst (MA): Cambria Press.
- Moriarthy, Elizabeth (1972). "The Comunitarian Aspect of Shinto Matsuri". *Asian Folklore Studies*, 31, 91-140.

- Nobuhiko, Iwasaki et al. (1989). *Chōnaikai no kenkyū* 『町内会の研究』 (Study of Neighborhood Association). Tōkyō: Ochanomizu shobō.
- Oka, Masao (1958). "Nihon bunka no kisokōzō 「日本文化の基礎構造」" (Basic Structure of Japanese Culture). Ōmachi, Tokuzō et al. (eds.), *Nihon Minzokugaku taikei* 『日本民俗学大系』 (Japanese Folklore), vol. 2. Tōkyō: Heibonsha, 5-21.
- Podsakoff, M. Philip et al. (1990). "Transformational Leader Behaviours and their Effects on Followers' Trust in Leader, Satisfaction and Organisational Citizenship Behaviours". *Leadership Quaterly*, 1, 107-42.
- Redfield, Robert (1956). *The Little Community: Viewpoints for the Study of a Human Whole.* Chicago: University of Chicago Press.
- Schnell, Scott (1999). *The Rousing Drum. Ritual Practice in a Japanese Community*. Honolulu: University of Hawaii Press.
- Sekizawa, Mayumi (2000). Miyaza to rōjin no minzoku 『宮座と老人の民俗』 (Folklore of old people and parish guild). Tōkyō: Yoshikawa kōbunkan.
- Sugimoto, Yoshio (2003). An Introduction to Japanese Society. Cambridge, Cambridge University Press.
- Suzuki, Toshio (1969). Shima minzoku (Mieken kyōdoshiryōkan sosho 15) 『志摩民俗 (三重県郷土資料漢書15) 』 [Shima Folklore (Mie Prefecture Regional Material Books, 15)]. Vol. 2. Tobashi: Mieken kyōdo shiryō kankai.
- Takeuchi, Toshimi (1952). *Inkyo* 「隱居」 (retirement). *Nihon shakai minzo-ku jiten* 『日本社会民俗辞典』 (Dictionary of Japanese folk society). Tōkyō: Nihon minzokugakkai, 57-9.
- Wakamori, Tarō (1965). *Shima no minzoku* 「志摩 の 民俗」 (Folklore of Shima). Tōkyō: Yoshikawa kōbunkan.
- Wilhelm, Johannes H. (2004). "Particular Aspects of Village Life and Fisheries". Makino, Mitsutaku; Wilhelm, Johannes H.; Yamamoto (eds.), Overseas Fishery Cooperation Foundation Japan. Japan and Her Fisheries, Tōkyō, Overseas Fishery Cooperation Foundation Japan, 61-70.
- Yamada, Hitoshi (1995). *Tayō hebi kaijin Kamishimachō gētā matsuri no shōchō sekai* 「太陽・蛇・海神 神島町ゲーター祭りの象徴世界」 (Sun, Snake, Sea God the Symbolic World of the Kamishima *Gētā* Festival). *Hosei Jinruigaku* 『法政人類学』 (Law and Anthropology), 67, 13-19.

This collection of essays brings together a range of critical approaches, from varying disciplinary backgrounds, to provide an in-depth overview of the past and current status of small-scale fisheries in Japan. The book attempts to map out some of the major themes relating to communitybased fisheries-management systems, environmental sustainability, lottery systems for allocating fishing spots. fishing livelihoods, local knowledge, social vulnerability to environmental hazards, socioeconomic factors affecting small-scale fisheries development, history of destructive fishing practices, women's entrepreneurship in the seafood sector, traditional leadership systems, religious festivals, and power relationship between local communities and government agencies. The aim of this book is then to provide a comprehensive and multifaceted analysis of the cultural richness of this fishing sector, which still plays a key role in the broad academic debates focused on the potential small-scale fishery trajectories within the context of global scenarios.



