A transition beyond traditional fisheries: Taiwan's experience with developing fishing tourism

Chung-Ling Chen⁎, Ya-Chiao Chang

Institute of Ocean Technology and Marine Affairs, Department of Hydraulic and Ocean Engineering, National Cheng Kung University, 1 University Road, Tainan 70101, Taiwan, ROC

ARTICLE INFO

Keywords:
Fishing tourism, transformation of traditional fisheries
Anglers’ perception
Alternative economic income

ABSTRACT

Transforming fisheries into tourism has become a global trend. It arises mostly due to a decline in income generated by traditional fisheries, and fishers thus turn to seek alternatives by engaging in marine tourism activities. Taiwan has practiced this transformation policy for more than two decades, and fishing tourism has developed as a major outcome. This paper aims to investigate Taiwan’s experience with developing this activity, with an emphasis on the emerging concerns it faces and anglers’ perception of trip quality and potential management measures. The results show that anglers had a general satisfaction with the service delivered by operators. However, concerns regarding sustainable development of this activity were identified, mostly involving ineffective enforcement of regulations against illegal fishing, conflicts of interest between commercial fishing and recreational fishing, lack of statistics on harvest, improper angler behavior, and competition from yachts. Lastly, management implications for sustainable fishing tourism were discussed, highlighting suggestions to alleviate the concerns, including strengthening management of the harvest, encouraging dialogue between commercial and recreational sectors, enhancing marine environmental stewardship among anglers, and improving coordination of management to create a fair and balanced environment for recreational fishing vessels and yachts.

1. Introduction

It has been a trend worldwide that traditional fisheries have needed to diversify into developing tourism in response to its decreasing ability to generate income as a result of declining fisheries resources and the rise in operating costs (fuel, personnel, etc.). In Ecuador, fishers are seeking alternatives in the more profitable tourism industry by taking tourists out on their boats to experience an authentic day at sea [1]. In Scotland, fishing vessels take tourists out to sea to watch whales in order to bring in income from outside the community when fishing is proving to be unprofitable [2]. In Mexico, fishers are becoming local service providers and are engaged in whale shark ecotourism in Bahia de los Angeles [3]. At Jeju Island, South Korea, fishers open their fishing grounds to tourists, take them fishing and diving, and convert their homes into home stays because of decreased income arising from declining fishing resources and consequent out-migrating of residents [4,5]. In Italy, along a coastal area of the Strait of Sicily, fishing tourism transformed from ancient bottom longline fishing, which potentially produce several positive impacts, including alternative sources of income for artisanal fishers, enhancement of underexploited species in the perspective of environmental sustainability, and the recovery of a disappearing mode of fishing [6]. In Taiwan, traditional fisheries have transformed, as well, by allowing fishing vessels to take tourists out to sea to have fun. These cases vividly demonstrate that traditional fisheries have embraced tourism as a way of generating alternative income, which has become a part of the socioeconomic fabric of fishing villages. This phenomenon is going in the right direction as outdoor activity, including nature-based tourism, is growing in popularity worldwide [7].

Taiwan’s traditional fisheries are conducted for commercial purposes. Since 1980s, fisheries have suffered from overcapacity and overfishing in its nearshore waters, leading to decreased incomes from local fishing activity, a shrinkage of the fishery industry, and consequent out-migrating of young adults from fishing villages [8]. The policy of transforming fisheries into tourism was therefore initiated by the authority with three mandates: (1) alleviating socioeconomic problems as a result of overcapacity and overfishing of the coastal resources by providing alternative income for fishers, (2) reducing fishing pressure by diverting part of fishing vessels away from engaging in commercial fishing, (3) creating recreational opportunities in

⁎ Corresponding author.
E-mail address: chungling@mail.ncku.edu.tw (C.-L. Chen).

http://dx.doi.org/10.1016/j.marpol.2017.02.011
Received 15 February 2017; Accepted 25 February 2017
0308-597X/© 2017 Elsevier Ltd. All rights reserved.
response to the booming tourism market [9].

While the policy of transforming fisheries into tourism has been in place, it is noted that when alternative job opportunities are not related to fishing, they can easily alienate fishers from their roots and culture [10]. It is also noted that fishers engaging in alternative jobs is not a new idea, but many of these job offers have failed worldwide, because fishers generally wish to remain as fishers [1]. In line with this, this policy has proceeded in a way that has fishers who engage in recreational activities remain as fishers and their vessels retain the status of fishing vessels, even though the vessels seldom go out for fishing. To put this policy into practice, the most important and fundamental initiative was to revise the Fishery Act in 1992, which provides a legal basis for fishing vessels to engage in marine recreational activities.

After more than two decades since the fisheries transformation policy was established, fisheries have successfully embraced tourism as demonstrated by the fact that as of January 2016, there were 311 fishing vessels engaged in recreational activities, offering major recreational opportunities in Taiwan’s marine tourism market, including fishing, boating, whale watching, diving and lagoon cruising. The largest portion of these vessels offered fishing activities [11].

Fishing tourism refers to the recreational activity that fishers take tourists’ on board fishing vessels out to sea to go fishing. By this definition, it is also called recreational fishing in this paper due to its non-commercial fishing and fun-seeking nature, as indicated in the definitions used to characterize recreational fishing [12]. Recreational fishing similarly involves taking of fisheries resources as commercial fishing; however, it has a much lower inherent ecological impact than the latter do [13]. Given its significant and growing importance in Taiwan’s marine recreation industry and its relevance to fisheries management, there has, however, been relatively limited research pertaining to this activity. This paper aims to examine Taiwan’s experience with developing fishing tourism, with an emphasis on the emerging concerns it faces and anglers’ views towards trip quality and potential management measures. It is noted that identifying anglers’ perceptions of regulations can assist in determining fishers’ behavior and improving the management of coastal fisheries [14]. It is also noted that trip quality has been shown to be good indicators of future behavioral intentions [15,16]; consequently, it is important in sustaining fishing tourism.

The paper first presents an overview of Taiwan’s fishing tourism and then a description of the qualitative interview and the questionnaire survey methods. The results of anglers’ perceptions and areas of concerns are presented, followed by a discussion of the management implications for sustainable fishing tourism. Finally, concluding remarks are offered. It is envisioned that the insights offered in this paper will inform theory and practice for those fisheries in other parts of the world, which similarly face socioeconomic problems arising from traditional fisheries and have to seek a way to alleviate these problems by transforming fisheries into tourism.

2. Overview of Taiwan’s fishing tourism

A total of 154 fishing vessels were engaged in fishing tourism. These vessels, stationing at 48 fishing harbors, are scattered around Taiwan and its outlying islets, with a high concentration on the northern coast (Fig. 1) [11]. The reasons for this geographical concentration are twofold. One is that the north coast features a natural rocky seascape and abundant fisheries resources due to the Kuroshio and its branch current meeting here. The other is the proximity to the Taipei metropolitan area, where the population is huge. By contrast, the central coast features tidal flats and is highly influenced by tide-generated processes, where fishing harvests suffer from big tidal differences [18]. Therefore, fishing vessels have to wait for suitable tidal conditions to enter or exit the harbors, which is unfavorable for the development of recreational fishing. In the south, east coast and outlying islets (e.g., Penuh archipelagos, Green Island), favorable fishing grounds exist, and the prospect for developing recreational fishing is good.

Operators generally have fisheries background. This facilitates them venturing into tourism business, since they know more about maritime conditions (e.g., wave, tides and currents), seasonal catch and the areas where fish potentially aggregate, compared to those who have no fishery background. With this background, they are able to find specific fishing grounds, catering to their customers. Most of fishing grounds are the places surrounding rocks, reefs (natural or artificial), ship wreckages, or are within several miles of the coast. Fish species are diverse, depending on seasons and fishing areas. Baitfish, grouper, seabream, snapper, mackerel, greater amberjack, tuna, red big eye, porgy, bass, squid, and dolphin fish are commonly caught fishes.

Anglers are roughly divided into two types: professional and experiential. The former are characterized by having higher levels of angling skills, having their own fishing gear, and regularly participating in recreational fishing. In other words, they have high involvement in fishing (i.e., specialization) [19]. Professional anglers can be further divided into two subgroups based on motivations: leisure and profit. The former enjoy fun brought by the activity itself and keep fish for home consumption or give it away to relatives or friends. On the other hand, the latter care profit more than fun and thus catch as much fish as they can. The fish is mainly for sale and profit. It is worth noting that in Taiwan, there are no such anglers that fish purely for ‘recreation’ and release fish, presenting a marked contrast to a high proportion of anglers who fish solely for recreational purposes instead of for food or income in the Northeastern US [20].

By contrast, experiential anglers usually do not have angling skills nor have their own fishing gear. They do not participate in this activity on a regular basis either. Anglers of this type are mostly driven by curiosity about angling at sea. Some of them may gradually develop an interest, if they participate in recreational fishing more times, and thus would eventually become professional ones.

Electronic communication tools (i.e., Facebook, webpages) are often used to advertise recreational fishing trips by operators. The information mostly cover the time and date of the trip, fishing grounds, target species, fares etc. The trips for experiential anglers are comparatively shorter in time (2–6 h), have lower fares (NTD 800–1000), and have regular sea routes. By contrast, the trips for professional anglers are longer in time (12–48 h), have higher fares (NTD 2000–5000), and have various sea routes, depending on seasonal catch. In addition, operators can diversify their business by also offering chartered service where anglers pay a lump sum fee for the service as a group.

3. Management of fishing tourism

A regulation dedicated to manage recreational fishing vessels was stipulated in 1993. It has later gone through several revisions over time. This regulation requires a permit for any fishing vessel engaging in recreational activities. The granting of permits comes with restrictions or conditions. First of all, a number of requirements were made for the sake of passenger safety. Specifically, vessels need to be
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات