

## Policy for returning to fisheries in Korea

**Jihoon Kim**

*University of Ehime, Japan*

**Akira Nakayasu**

*University of Ehime, Japan*

### Abstract

Korea's fishing industry is currently facing problems involving an aging society and lack of successors in fishing villages. Therefore, the Korea Ministry of Oceans and Fisheries (KMOF) has implemented a policy supporting U-turn fishers, who leave their place of origin for a job and then return home or move to where they can work in the fishing industry. Moreover, some local governments have established a policy for U-turn fishers. The KMOF policy is a financial support program with low interest rates and lengthy reimbursement periods; however, few beneficiaries exist. Meanwhile, local government policy benefits most persons in corresponding areas. However, the sums are relatively small, and only two local governments have enacted the policy. This study determines the performance of the policy through in-depth interviews and a survey. The results indicate that KMOF policy may be limited in terms of its scope. In addition, noneconomic support programs, such as fishing education, harmony between existing fishers, and the acquisition of fishery rights, are required. The number of U-turn fishers will continue to increase as the baby boomer generation nears retirement and unemployment of youth increases. As such, the Korean government needs to improve the policy in keeping with the times.

**Keywords:** Korean fisheries, Fisheries policy, U-turn fishers, Fishing Village Cooperatives, Fisheries Cooperatives Act.

### Introduction

Commencing in 1962, the Korean government adopted the model of the five-year plans; since then, the industrial structure has moved to manufacturing and service industries from primary industries (Kuznets, 1990). In the 1960s, primary workers constituted approximately 60 percent of the total workers. However, in the 1990s, tertiary industry workers constituted over 50 percent of the total workers (Mah, 2007). These changes have impacted the population in rural areas, with many young people moving to the major cities. As such, rural areas have fast become an aging society (Cheong, 2005). This aging phenomenon has emerged as a genuine crisis, especially in fishing villages and within the fishing industry (Cheong, 2005). According to data released by Statistics Korea about the age of fishing workers, fishers aged over their 60s represent the largest portion at 44.2 percent, followed by those in their 50s at 25.8 percent and those in their 40s at 9.6 percent, whereas those under their 30s constitute 20.4 percent. In addition, more than 50 percent of marine products are imported goods, and this percentage rises year-on-year (KOSIS, 2014). Unexpected industrial structure changes have brought about the increase (Erisa, 2015). In the face of declining

fisheries, the Korean government is trying to come up with several policies. However, most policies are restrictive, such as the “fishery village stay” program, local festival events, and attempts to attract tourists (Cheong, 2003). In other words, policies that enhance fisheries income are rare. In these situations, U-turn fishers are prominent in the fishing village. A U-turn fisher is a person who has had to leave their place of origin for a job and has either returned home or moved to the country after quitting their job and who wants to work in the fishing industry. However, city people can experience economic difficulties when they settle in a fishing village and attempt to start up in fisheries. They need to buy or rent a house, a fishing boat, fishing gear, etc. As such, it is difficult to determine whether city people can be labelled U-turn fishers. Therefore, the Korean government has been working on the returning to fisheries project since 2010. This project meshes with the baby boomer generation—those born during demographic post-Korean War between 1955 and 1964. This age group is nearing retirement, but the number of people returning to fisheries is increasing (Lee, Roh, Jung, & Jang, 2016).

This study outlines the returning to fisheries project and the new movement of U-turn fishers. In addition, using a questionnaire survey, this study determines the role of government in terms of how well U-turn fishers manage the move to a fishery village.

## 2. Characteristics of Korean fisheries

### 2.1 Fishery type by the Fisheries Act

In Korea, the fishing industry is generally engaged in farming or harvesting fish at sea and salt production. Fisheries is categorized as free fisheries, permitted fisheries, and chartered fisheries by Korea’s Fisheries Act and enforcement ordinance (KMGL, 2015).

First, free fisheries refers to the way in which anyone can start fishing by the submission of a brief report to the administrative office. This type of fishery includes the capture of aquatic animals and seaweed using various small fishing apparatus.

Second, permitted fisheries is classified under two large groups. The authorities license is for fishing boats or vessels and fishing gear to conduct onshore fishery, coastal fishery, and stationary fishery and includes facilities for production (Shin, 2013). Permission is a formal administrative action of the withdrawal of the ban, and approval from an administrative agency is required to engage in permitted fishery (KMGL, 2015). Anyone can engage in permitted fishery after they purchase boat or gear that has already received the approval from the administrative agency (Liu, 2014).

Finally, there is the aquaculture industry and chartered fixed shore net fishing. Any person wishing to perform these operations must obtain approval from an administrative agency (KMGL, 2015). Aquaculture involves the farming of aquatic organisms, such as fish, crustaceans, mollusks, and aquatic plants. In contrast, fixed shore net fishing is the catching of fish within a certain region using nets. The biggest difference between permitted fisheries and chartered fisheries is the exclusive rights to public waters (Liu, 2014).

## 2.2 Fishery rights

Fishery rights permit fishers to farm specific aquatic products in public water zones. A permit is valid for 10 years but can be extended up to a further 10 years (KMGL, 2015). This right has the characteristics of both real rights and property rights; however, any person wishing to transfer to other fisheries must obtain authorization (KMGL, 2015). Directors of fishing village cooperatives (FVC) are authorized by the administrative agency to issue fishery rights (Choe, 1998).

## 2.3 Fishing Village Cooperatives

FVC are part of a special organization in Korean fishing villages. FVC appeared for the first time in 1962 under the Fisheries Cooperatives Act (Cheong, 2004). It comprises members of the Regional Fisheries Cooperatives (RFC) who fulfill a dual purpose of raising fisheries income and improving relationship between members (Kang, 2006). FVC have the right to grant fishery rights through the Fisheries Cooperatives Act, but these rights are only allocated to members of both the FVC and RFC. Being a member of the RFC takes precedence in obtaining fishery rights (Cheong, 2004). In 2014, there were 1994 FVC with more than 200,000 members (KOSIS, 2014).

## 2.4 National Federation of Fisheries Cooperatives and Regional Fisheries Cooperatives

The National Federation of Fisheries Cooperatives (NFFC) was founded in 1962 to strengthen the socioeconomic status of fishers by Fisheries Cooperatives Act (KMGL, 2015). The RFC is a sub-organization of NFFC and supports fishers directly on-site in fishing villages (Lee & Midani, 2015). In Korea, there are 70 RFC, with a total membership of over 159,000 (NFFC, 2014). To become a member of the RFC, candidates must satisfy two conditions: they must have a regular domicile of home or business and engage in fisheries for more than 60 days in a year. The director of FVC assesses these two conditions and can issue confirmation that these have been met (Park, 2013). In other words, NFFC have erected the substructure FVC, separate from RFC. This is because the RFC centers on distribution and credit business, whereas the FVC focuses on marine production (Lee & Midani, 2015).

## 3. Support policy for U-turn fishers

### 3.1 Support policy by the Korea Ministry of Oceans and Fisheries

The Korea Ministry of Oceans and Fisheries (KMOF) has implemented a policy for people who wish to work in the fishing industry by assisting with smooth settlement in fishing villages. The purpose of this policy from KMOF, which has links to NFFC, is to invite persons to fishing villages and provide successors that can foster fisheries. This policy takes the form of a financial support program, with grants totaling 200 million KRW ( $\approx$  180,000 USD, 1 USD  $\approx$  1100 KRW) in loans (KFIPA).

The period for the reimbursement of loans must not exceed 10 years and includes a period of deferment not exceeding five years (KFIPA). The interest on a loan is 2%, which is low compared with the market rate (KFIPA). To receive a benefit from this policy, applicants must meet two criteria: no experience in fisheries and willingness to move to fishing areas and work in fisheries, such as aquaculture, general marine fisheries, and fishing village tours (KFIPA). The fund was issued to the 839 U-turn

fishers between 2010 and 2016 (Table 1).

Table 1. Trend of recipients since 2010

	Aquaculture industry	Fishing vessel fisheries	Processing	Fishing village tours	Other	Total
2010	34 (56.7)	16 (26.6)	3 (5.0)	3 (5.0)	4 (6.7)	60 (100.0)
2011	22 (61.1)	12 (33.3)	0 (0.0)	1 (2.8)	1 (2.8)	36 (100.0)
2012	27 (43.6)	26 (41.9)	2 (3.2)	1 (1.6)	6 (9.7)	62 (100.0)
2013	43 (47.8)	35 (38.9)	5 (5.6)	3 (3.3)	4 (4.4)	90 (100.0)
2014	39 (36.8)	53 (50.0)	8 (7.5)	2 (1.9)	4 (3.8)	106 (100.0)
2015	57 (26.2)	134 (61.8)	18 (8.3)	5 (2.3)	3 (1.4)	217 (100.0)
2016	68 (25.4)	176 (65.7)	6 (2.2)	7 (2.6)	11 (4.1)	268 (100.0)

Source: The Korea Ministry of Oceans and Fisheries

As shown in Table 1, when comparing aquaculture and fishing vessel fisheries, the ratio of aquaculture had a higher percentage until 2013. In 2014, however, the ratios reversed. This was caused by the FVC and fishery rights. U-turn fishers who wanted to work in aquaculture needed to join the FVC and obtain fishery rights. However, the issue of fishery rights is no longer possible in some areas due to the limitations on farming lucrative products, such as laver (*Porphyra tenera*), abalone (*Haliotis discus hannai*), and seabream (*Pagrus major*) (Lee & Yoo, 2014). As such, U-turn fishers who do not have fishery rights must wait to obtain one from an existing aquaculturist. In contrast, in the case of fishing vessel fisheries, U-turn fishers can conduct coastal fishery when they buy a fishing boat that comes with a fishing license (Lee & Yoo, 2014). Thus, there is only a low entry barrier to business start-up in fishing vessel fisheries.

### 3.2 Support policy by the local government

The U-turn fishers project has also been enacted by some local governments to increase population and tax revenues and revive the regional economy. Local government policy is divided into two measures—financial support and fisheries training (KFIPA). First, financial support is similar to the KMOF program, but they are not large sums. Because the financial independence rate of each local government is nearly 50 percent, with the exception of Seoul, the capital of Korea (KOSIS, 2015), there are limitations on excessive spending on U-turn fishers. Therefore, financial support has been implemented in only two provinces, Wando (Joellanam province) and Jangheung, which have well-developed fishery industries. Wando provides a grant of 5 million KRW ( $\approx$  4,500 USD) toward the expenses incurred for resettlement,

and a further 5 million KRW ( $\approx$  4,500 USD) can be contributed to the repair costs of housing. (Wando-County). Jangheung provides more for resettlement—30 million KRW ( $\approx$  27,000 USD)—and repair costs for housing is the same as that of Wando—5 million KRW (Jangheung-Gun County). Both areas lead other areas in fisheries, and the seafood and shells produced in these areas are eminent. However, both regions are experiencing great difficulty in finding successors to meet the labor shortage. Therefore, the financial support is being used to entice new fishers.

Next, the fisheries training program provides training on effective fishing techniques, methods of farming, etc. Most U-turn fishers have virtually no knowledge of fisheries, excluding those who inherit fishing practices from their parents. This education is needed for U-turn fishers, especially for those who have no connection to fishery villages; however, there are no programs with the exception of Jangheung. Jangheung offers a more advanced internship program, which is more closely aligned with existing fishers. However, other areas are considering to introduce an education program (Jangheung-Gun County).

## 4. Method

### 4.1 Description of the study areas

This study was conducted in Wando and Jangheung in southwest Korea. Wando is known for abalone farming and constitutes over 90% of domestic production. Moreover, Wando produces over 80% of Korea's total production of seaweed farming (Baek, 2008). Until recently, Jangheung was unknown in fisheries. However, in 2009, the farming of organic laver commenced after efforts put it in place by local government and fishers succeeded. Thereafter, Jangheung became the main farming area for sustainable laver. In 2015, the numbers of fishers in Wando and Jangheung totaled 28,456 and 2,520, respectively, constituting approximately 52.3% and 6.1% of the total population (KOSIS, 2014). However, in the past 10 years, the aging phenomenon has become particularly noticeable in both regions. The number of persons aged 65 or above has increased steadily by 28.1% (for Wando) and 28.6% (for Jangheung) (KOSIS, 2014). The general population of Korea has been on the decline for the last 20 years; however, the reduction ratio has now slowed to less than 10% from 2010 in both regions (KOSIS, 2014).

### 4.2 Questionnaires

The survey was conducted during the U-turn Fishers Policy Forum held in Wando in July 2015, and 164 U-turn respondents attended the forum. Of the total number of respondents, 46 fishers were from Jangheung and 118 were from Wando. The questions were in Korean. Questionnaires were based on factors regarding fishery type, the U-turn fishers support policy, and motivation for returning.

## 5. Discussion

Table 2 reveals different reasons for returning. However, being “unaccustomed to urban life” and “rural life after retirement” drew the most attention. The respondents

indicated that they wished to escape the hustle and bustle of city life.

Table 2. Motivation to return to fisheries

Motivation	Number of replies	%
Unaccustomed to urban life	51	31.1
Interested in fisheries	40	24.4
Parental persuasion	37	22.6
Rural life after retirement	26	15.9
Other	10	6.0
Total	164	100

Figure 1 illustrates how most of the U-turn fishers returned to their native place of residence. Blood relations are considered to be meaningful in Korea (Kim & Cannella, 2008), and many have relatives who still live in fishing villages and engage in fisheries. They become good, reliable mentors.

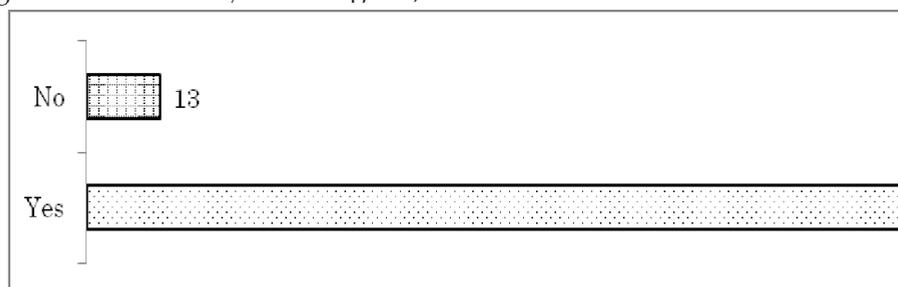


Figure 1. Return to native place of residence

Table 3 outlines the types of fisheries. Free fisheries has the highest percentage because it is the most accessible and inexpensive to implement. Permitted fisheries and aquaculture has similar ratios. Except for aquaculture fishers, everyone engages in free fisheries, and permitted fisheries has no fishery rights. However, most of them (61/82) indicated that they want to farm costly marine products. This means that U-turn fishers are hopeful about joining the aquaculture industry. Meanwhile, only 19% of aquaculture U-turn fishers (8/42) have secured fishery rights on their own. The others inherited the rights from their parents or relatives.

Table 3. Types of fisheries

Fishery type	Number of replies	%
Free fisheries	69	42.1
Permitted fisheries	40	24.4
Aquaculture	42	25.6
Other	13	7.9
Total	164	100

Most U-turn fishers stated that financial problems were the biggest issue since they started fisheries (Figure 2). To solve financial problems, the acquisition of fishery rights and improvement to fishery techniques were the most popular choices (Figure

3). Most U-turn fishers wanted to solve their financial problems through primary jobs, not grants.

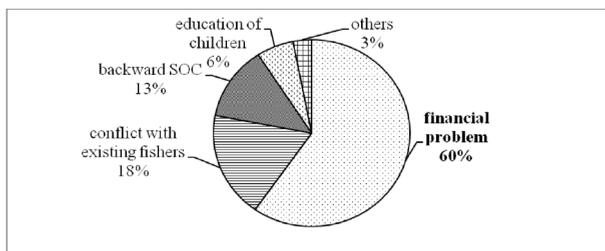


Figure 2. Difficulties encountered in fisheries

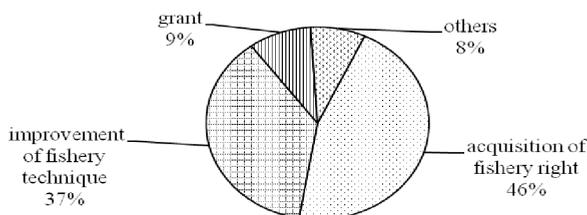


Figure 3. Ways to solve financial problems

## Conclusions

Korean fisheries may be less able to add benefit if decreases in fishing village populations remains an ongoing issue. U-turn fishers policy has the potential to do much for the ongoing development of fisheries. However, financial policy is limited in its call to fishers; policies must also address fishery rights, technical education, and conflict with existing fishers. These matters cannot be resolved in a short period, so government needs to establish a long-term policy.

The number of U-turn fishers will continue to increase because the baby boomer generation is nearing retirement and there are high levels of youth unemployment. Korean fisheries will progress when the flaws in policy are corrected and the different abilities of U-turn fishers are better utilized.

## References

- Baek, E. Y. (2008). A strategy for expanding export to Japan through investigation on Japanese abalone markets. *KFMA*, 25(2), 49–76. (Korean).
- Cheong, S. M. (2003). Privatizing tendencies: Fishing communities and tourism in Korea. *Marine Policy*, 27(1), 23–29.
- Cheong, S. M. (2004). Managing fishing at the local level: The role of fishing village cooperatives in Korea. *Coastal Management*, 32(2), 191–201.
- Cheong, S. M. (2005). Korean fishing communities in transition: Limitations of community-based resource management. *Environment and Planning A*, 37(7), 1277–1290.
- Choe, J. Y. (1998). A comparative study of the co management of fishery right by fisheries cooperatives centered on the management of fishing ground through eochon-gye. *The*

- Journal of Fisheries Business Administration*, 29(2), 21–46. (in Korean)
- Erisa, X. (2015). What factors in the policy-making process determine the priority given to a policy issue? *Academic Journal of Business, Administration, Law and Social Sciences*, 1(1), 52–59.
- Jangheung-Gun County. (2014). Retrieved from <http://www.jangheung.go.kr/>
- Kang, J. S. (2006). Analysis on the development trends of capture fisheries in North-East Asia and the policy and management implications for regional co-operation. *Ocean & Coastal Management*, 49(1–2), 42–67.
- KFIPA (Korea Fisheries Infrastructure Promotion Association). Retrieved from <http://www.sealife.go.kr/>
- KMGL (Korea Ministry of Government Legislation). (2015). Retrieved from <http://www.law.go.kr>
- KOSIS (Korean Statistical Information Service). (2014). Retrieved from <http://kosis.kr/>
- Kim, Y. M., & Cannella Jr. (2008). Social capital among corporate upper echelons and its impacts on executive promotion in Korea. *Journal of World Business*, 43(1), 85–96.
- Kuznets P. (1990). Indicative planning in Korea. *Journal of Comparative Economics*, 14(4), 657–676.
- Lee, H. S., Roh, J. S., Jung, J. H., Jang, W. C. (2016). Network analysis of urban-to-rural migration. *The Korean Journal of Applied Statistics*, 29(3), 487–503. (in Korean)
- Lee, M. K., & Yoo, S. H. (2014). The role of the capture fisheries and aquaculture sectors in the Korean national economy: An input–output analysis. *Marine Policy*, 44, 448–456.
- Lee, S. G., & Midani, A. R. (2015). Fishery self-governance in fishing communities of South Korea. *Marine Policy*, 53, 27–32.
- Liu Z. (2014). *A comparative study license system about marine fish farming between the Korean and Chinese*. Master's thesis, Department of marine business and economics, Pukyong national University. (in Korean).
- Mah, J. S. (2007). Industrial policy and economic development: Korea's experience. *Journal of Economic Issues*, 41(1), 77–92.
- NFFC (National Federation of Fisheries Cooperatives). (2014). Retrieved from <http://www.suhyup.co.kr/>
- Park, J. M. (2013). A study on the promotion of retail business on primary fisheries cooperatives in Korea. *The Journal of Fisheries Business Administration*, 44 (1), 39-57. (in Korean)
- Shin, Y. M. (2013). The status and improvement of the fishing boat market in Korea coastal fishery. *The Journal of Fisheries Business Administration*, 44(1), 25–37. (in Korean).
- Wando-County. (2014). Retrieved from <http://www.wando.go.kr/>