



Full length article

Precarity and social protection of migrant fishers in Thailand: Case studies of death and disappearance at sea

Supang Chantavanich^{*}, Waranya Jitpong

Institute of Asian Studies Chulalongkorn University, 7th Floor, Prajadhiporn-Rambhai Barni Bldg., Phayathai Road, Bangkok 10330, Thailand

ARTICLE INFO

Keywords:

Thailand
Fishing industry
Social Protection
Death and disappearance
Welfare Committee

ABSTRACT

The objective of this paper is to evaluate the effectiveness of policies related to the social protection of migrant fishers. It does so by examining Thailand's progress in promoting a legal framework for the social protection of fishers. The following three instruments are analysed: the Social Security Act 1990, the Workmen's Compensation Act 1994 revised 2018 and the Labour Protection in Fishing Work Act 2019, with a focus on death and the disappearance of migrant fishers at sea. The assessment of these instruments is based on meetings and interviews with Thai employers and Thai and Myanmar fishing employees. The paper concludes by providing recommendations to enhance the protection of migrant fishers in the Thai fishing industry.

1. Introduction

Migrants account for the largest group of workers in the fishing industry in Thailand. In recent years, there has been a significant increase in the number of regular migrant fishers: from 15,280 in 2016–36,034 in 2022 [9]. Migrant workers have contributed to the growth of the fishing industry in Thailand, which is one of the country's most precarious industries. Before 2015, many migrant fishers worked in hazardous work and forced labour conditions [5] in which they were subjected to deceptive and coercive labour practices, often leading to debt bondage. Such fishers also faced restricted freedom of movement, their identity documents were confiscated, and they could be subject to physical violence and wage theft [4]. Working conditions began to improve after 2015 when the European Union (EU) issued Thailand a yellow card for Illegal, Unreported and Unregulated (IUU) fishing. However, a new type of precarity has emerged in Thailand's fishing industry. Increasingly, there are accounts of migrant fishers reported as missing or dying at sea [39,41]. Thailand's Police Agency has reported that from 2020 to 2022, 306 migrant fishers were classified as dead or disappeared at sea [30]. Cases of the disappearance and death at sea of migrant fishers have rarely been reported because of limited access to relevant information. This raises the question of how many migrant fishers are at risk in Thailand. Despite the significant contribution the migrant fishers make, their vulnerability has not been adequately addressed. This raises a question about the existing social protection regime and identifies a need to further investigate this issue.

In 2014, regular migrant workers from Myanmar, Cambodia and Laos were included in Thailand's Social Security Fund. However, because of their different working conditions, migrant fishers were not included in this fund. It was not until 2020 that the government of Thailand required employers to include registered migrant fishers under the Workmen's Compensation Fund, which covers benefits for injuries, disabilities and death resulting from work activities. Irregular migrant fishers, the majority of whom came from Myanmar, were not included in most protection programs [6]. This paper examines the development and effectiveness of policies related to the social protection of migrant fishers in Thailand. Three case studies of migrant fishers who died or disappeared at sea are discussed to reflect policy development and its effectiveness in protection procedures for this group of workers in Thailand. Protection effectiveness refers to the existence of measures that can correct problems that occur in Thailand's fishing industry pertaining to death and disappearance at sea and that can improve the process of policy implementation and its design to reach the goal of protection.

The paper is structured as follows. Section 2 discusses the context of the Thai fishing industry before 2015 when forced labour conditions were identified in commercial sea fishing and the significant changes that occurred in state control and monitoring of the industry after the EU issued a yellow card for IUU fishing. Section 3 introduces the methods employed for the study. The first part of Section 4 examines Thailand's legal framework and measures relating to social protection for fishers, particularly the Social Security Act 1990, the Workmen's Compensation

^{*} Corresponding author.

E-mail address: chansupang@gmail.com (S. Chantavanich).

<https://doi.org/10.1016/j.marpol.2023.105743>

Received 27 October 2022; Received in revised form 2 May 2023; Accepted 21 June 2023

Available online 4 July 2023

0308-597X/© 2023 Elsevier Ltd. All rights reserved.

Act 1994 revised 2018 and the Labour Protection in Fishing Work Act 2019. The second part of Section 4 presents three case studies of death and disappearance at sea to illustrate the effectiveness of the social protection of fishers in Thailand. The paper concludes by discussing the levels of maturity of social protection systems in Thailand and the limitations of the design of protective mechanisms and makes recommendations for more comprehensive protection of migrant fishers in the Thai fishing industry.

2. Thai fishing industry, precarity and death and disappearance at sea

This section presents the context of the Thai fishing industry before and after 2015 and discusses the precarious working conditions of migrant fishers, who continue to require special protection in Thailand even after the improvement in the industry in 2015.

2.1. Background and development of Thai fishing industry before and after 2015

Since 1993, migrant fishers have crossed the border from Myanmar to be registered and work in Thailand [6]. Registered fishers were given a work permit by Thailand's Ministry of Labour and an employment contract with a boat owner. Nonetheless, up until 2015, these fishers could find themselves in a precarious work situation arising from a vague employment contract or even a lack of an employment contract, leading to the possibility of being caught in a situation of forced labour [5]. Precarity and migration-specific vulnerabilities can exist at each stage of the migration process [12]. Two characteristics of fishery work complicate efforts to regulate and improve work conditions in this industry: first, migrants work on vessels at sea and thus employment conditions are difficult to monitor; and second, workers in the fishing industry tend to be migrants performing work that Thai nationals do not want to do [24]. In 2015 after the IUU yellow card was issued by the EU, Thailand began to impose tight regulations on all fishing vessels. From this time, skippers have been required to bring migrant crews with their identity document to present to authorities at a Port-in Port-out (PIPO) Control Center as stated in the Royal Ordinance on Fisheries 2015. Employers were also required to include migrant fisher employees in the Workmen's Compensation Fund. This compensation fund is a part of the national welfare system. The inclusion is a measure to combat the forced labour situations observed by the International Labour Organization (ILO) and EU and revealed in academic research findings during the period 2013–2015. Apart from changes to practices at the port control, significant attempts to protect migrant fishers included wage payment through bank transfers and the provision of individual bank cards, which are mainstream protection measures for locals and for non-nationals in a society [44]. The ILO confirms that labour migration is prevalent in Association of Southeast Asian Nations countries and that there is a strong need to develop social protection for migrants [15]. With regard to COVID-19, an Oxfam paper revealed there was inadequate protection and support offered to migrant fishers and small producers in seafood processing in Thailand [36]. But many businesses in the fishing industry implemented additional health and safety measures [24]. Despite these improvements in the protection of migrant fishers, reporting of vulnerability related to death and disappearance at sea of migrant fishers is limited and remains a challenge.

2.2. Precarity and death and disappearance at sea of fishers in Thailand

Precarity in the context of this study refers to the increased vulnerability of workers [35], and it denotes the intersection between social exclusion and migration. Further, the word 'precarious' defines a class of workers that endures insecure conditions and low wages with no collective bargaining power [2]. Kasmir [18] expands on this definition to encompass work and livelihood, including the lack of a stable job,

affordable housing and social welfare provisions, all of which reflect social exclusion and marginalisation. The provision of social protection for migrants is a challenge for migrants in many countries because of their non-national status. Social protection is defined as the existence of policies, strategies and systems that respond to the vulnerability and poverty of a society. Sabates-Wheeler [36] indicates a relationship between a country's economic development and the provision of social protection. When migration is a widespread phenomenon, a country's stage of social protection can be a limiting factor to the social protection of migrants. Challenges can come from the different levels of maturity of social protection systems across countries as well as portability problems and access barriers. Challenges to social protection also include mobility between equally deficient social protection systems, ambiguous rights in relation to a state, and limited social protection design and distribution options for mobile populations.

The precarity of migrant fishers working in Thailand has been recognised since 2007 [6]. Over time, the level of precarity of this population increased. In 2013, a study by the ILO and Chulalongkorn University found that migrant fishers were victims of forced labour, with abusive conditions more likely to be found on long-haul fishing vessels [4,5]. In 2015, local Thai media and the Environmental Justice Foundation (EJF) identified 64 graves of migrant sea fishers on the islands in Indonesia [22,27,39]. The fishers had been working on Thai long-haul fishing vessels. EJF urged the Thai government to implement standard operating procedures for search and rescue and subsequent investigation of cases of death [39]. In 2019, the EJF reported that 29 fishers had lost their lives while working on Thai fishing vessels.

When vulnerability is linked with migration, more levels of social protection are needed [33]. Limitations in social protection are a foundational cause of the challenges Myanmar migrant fishers face when working in Thailand. The high prevalence of human mobility in many Asian countries, including Thailand, has changed the role of the family in providing protection to family members working abroad [42]. This means that the social protection provided by the state in a destination country is indispensable and the availability of and access to such protection must be explored in research. It should be noted that migrant fishers in countries other than Thailand experience vulnerability in their work. For example, recent studies found that migrant fishers in Taiwan and New Zealand also faced difficulties in working conditions [37,42].

3. Methodology

The paper is based on fieldwork undertaken between 2019 and 2020 as well as telephone interviews conducted during the COVID-19 pandemic from 2021 to 2023. The authors used a participatory action research approach to engage with fishers and employers [38]. In particular, they worked closely with a welfare committee in a fish factory to discuss and document first-hand information about the deaths and disappearances of migrant fishers on board Thai fishing vessels. Cases were selected based on their involvement in such deaths and disappearances incidents.

A welfare committee at the Maeklong Fishery Cooperative (MFC) was established in 2019 to hear the concerns of migrant and Thai fishers about their welfare in relation to precarious work. As part of the study, the authors volunteered to support the meetings of the Maeklong Fishery Cooperative Welfare Committee (MFCWC). We informed the committee about our research on death and disappearance at sea and asked for permission to interview Thai employers and Thai and migrant fishers about this issue. Three semi-structured interviews were conducted between 2019 and 2021 at MFCWC with two Thai employers and one Myanmar fisher. Two additional in-depth telephone interviews were undertaken from 2022 to 2023 with one Thai and one Myanmar employee. All the respondents were aware of the authors' support for the welfare committee and the research they were undertaking on death and disappearance of fishers.

The in-depth semi-structured interview covered questions about

participants' direct experiences with death and disappearance at sea, how the case was handled and processed for claims, and what observations and concerns they had about the effectiveness of the protection provided to death and disappearance cases. Respondents replied with trust in researchers and shared more information about death and disappearance than what was asked of them in the interviews by sharing their own documents, which included photos of a dead fisher and his parents, a copy of a fisher's identification card, and a copy of an official receipt of the premium paid for the Workmen's Compensation Fund. This gives the researchers confidence in the validity of data collected from the participants.

Each interview lasted between 30 and 40 min and notes were taken and checked with interviewees then translated into English. The documents shared by employers were used in a case study presentation with the permission of the employers.

4. Findings

4.1. Legal framework on social protection against death and disappearance

There are three major laws pertinent to the protection of migrant fishers in Thailand: Social Security Act 1990; Labour Protection in Fishing Work Act 2019; and Workmen's Compensation Act 1994 revised 2018, with its accompanying Workmen's Compensation Fund. The relevant measures are the roles of the Command Center for Combatting Illegal Fishing.

The basic law for the protection of workers in Thailand, is the Social Security Act 1990 which requires employers and employees to be members of Thailand's Social Security Fund. This fund provides benefits for seven areas: sickness, injuries, maternity, unemployment, death, family support and old age pension to employees. Specific to the fishing industry is the Labour Protection in Fishing Work Act 2019 [21], which aims to control unlawful fishing; the employment of illegal workers on fishing vessels; and the protection of the welfare of fishers. This act requires risk-based inspections of fishing vessels at port out; fishers to wear life jackets at all times on board; and the readiness of vessels to facilitate search and rescue operations [25]. These three requirements are directly related to death and disappearance at sea, which occur when fishers fall from the vessel, and they cannot be rescued. This law also requires all employers in fisheries to contribute to the Workmen's Compensation Fund, which covers compensation for death and injuries in the workplace. From 2018–2021, various reports indicated improvements in the social protection of migrant fishers in Thailand [1,8,22].

The Workmen's Compensation Act 1994 revised 2018 [43] and its accompanying Workmen's Compensation Fund have been applied to migrant sea fishers in Thailand. All employers of migrant sea fishers must contribute to the Workmen's Compensation Fund in accordance with the number of fishers they employ. What is particular in the Workmen's Compensation Act 1994 is its description of disappearance and eligibility for benefit claims as follows:

when an employee has disappeared for a period of no less than 120 days from the date of an incident, while working for or acting under the command of the employer, where there is reasonable cause to believe that such employee has died from suffering from perils while working ... including when the employee has disappeared while travelling by vehicles on land, air or water in order to work for the employer, where there is reasonable cause to believe that such vehicles have suffered peril and the employee has died [43].

The revised version of the Workmen's Compensation Act in 2018 states that beneficiaries can claim the survivors' benefit after 180 days. The revision is seen to be a response to the significant number of migrant fishers who have been reported as disappeared at sea and observations

of and reports from international non-governmental organisations [39].

Thai government measures for addressing death and disappearance at sea are reflected in the role of the Command Center for Combatting Illegal Fishing, which was established in 2015 to monitor the employment and working conditions of fishers and address IUU fishing challenges. All fishing vessels operating from Thailand are under the control and surveillance of the Command Center for Combatting Illegal Fishing. According to the ILO, better inspections can help reduce labour abuses [16]. In 2019, the responsibilities of the Command Center for Combatting Illegal Fishing were transferred to the Thai Maritime Enforcement Command Center (Thai-MECC). Thai-MECC includes six government offices: Thai Navy, Department of Fisheries, Department of Marine and Coastal Resources, Customs Department, Marine Department and Marine Police. Thai-MECC's role is to safeguard the country's maritime interests and security, including IUU fishing. It oversees and monitors the commercial fisheries sector [28]. The Thai-MECC's role relating to fishers' vulnerability includes the prompt interception, search, rescue and investigation of crew who fall overboard. Thus, Thai-MECC fulfils a protective and preventive role relating to measures against death and disappearance at sea.

Data from the Thai National Police Agency reveal that Thai fishers are also vulnerable to death or disappearing at sea due to the nature of precarious work. During the period 2020–2022, 306 fishers were reported as dying or disappearing at sea, with fishers from Myanmar accounting for most of these people (160 people), followed by Thai fishers (122 people) and Cambodian fishers (24 people) [30]. The total number of registered Myanmar fishers in Thailand in 2022 is 13,587, making the percentage of cases of suffering death or disappearance 0.32%. For Cambodian fishers, the number registered fishers in 2022 was 10,738, making the percentage of cases of suffering death or disappearance 0.08%. Thailand cases are more complicated because there is no requirement for Thai fishers to be registered, which means the total number of fishers is unavailable and no percentage can be calculated from the 26 cases of death and disappearance in 2022 (see Table 1).

Fig. 1 demonstrates a decreasing trend of death and disappearance of fishers from Myanmar, Cambodia and Thailand during the period 2020–2022. The decrease may reflect the awareness of the danger of death and disappearance in the industry in Thailand and some level of achievement of social protection.

4.2. Case studies of death and disappearance of fishers at sea

This section presents three case studies of the death and disappearance of fishers in Thailand to illustrate the search and rescue processes, circumstances in which next of kin can receive compensation, and the difficulties involved in these processes.

Table 1

Cases of Dead and Disappearing Fishers by Nationality as Percentage of Total Registered Fishers.

Nationality	2020	2021	2022	Total
Thai	48	48	26	122
Myanmar	64	53	43	160
Cambodian	9	6	9	24
Total death and disappearance cases	121	107	78	306
Total no. of registered fishers	33,998	31,348	24,325	
Thai (no registration)	NA	NA	NA	
Myanmar	22,807	21,915	13,587	
Cambodian	11,191	9433	10,738	
% of death and disappearance at sea				
Thai	NA	NA	NA	
Myanmar	0.28	0.24	0.32	
Cambodian	0.08	0.06	0.08	

Note: As Thai fishers are not required to register, it is not possible to calculate a percentage.

Source: National Police Agency. 2022.

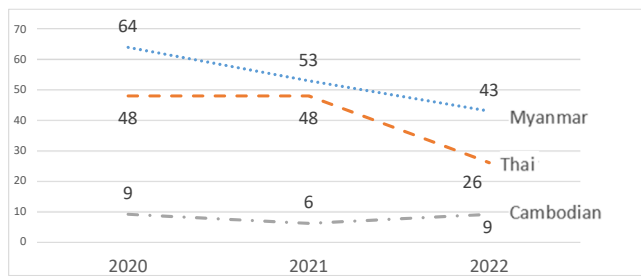


Fig. 1. Cases of Dead and Disappearing Fisher in Thailand (2020–2022). Source: National Police Agency. 2022.

4.2.1. Case study one: Incidence of death at sea and compensation

In August 2019, a young Myanmar fisher in Ranong Province died while working on a fishing boat. He was hit on his head by the drum of the winch while lifting the catch from the fishing net. The injury was severe, and he died shortly afterwards. His employer immediately informed his family in Myanmar and reported the death and the accident to the Ranong Police and the Social Security Office (SSO). As stipulated in the Labour Protection in Fishing Work Act 2019, employers of fishers must contribute to the Workmen's Compensation Fund for all employees to ensure prompt and equitable protection when injury, disease, disability or death result from employment [21].

The death of this fisherman occurred two months after the Labour Protection in Fishing Work Act 2019 was implemented in Thailand. This act states that when a fisherman dies, the employer must report the death to the provincial SSO and begin the process of benefit claims. The fund stipulates that in cases of death or disappearance of an employee, the next of kin (in order of importance, that is, parents, husband or wife, children under 18 years of age) will receive money to cover funeral expenses and the compensation of monthly wages for eight years [43]. Following the verification of identity documents and the worker's house registration, the SSO will release the compensation benefits to the next of kin. In this case, the employer told us in the interview that he suggested the fisherman's parents who lived in a town close to Ranong should come immediately to claim the benefit. The father came with an official document that confirmed his status as next of kin and he was compensated USD13,330 for the death of his son. This case reflects the effectiveness of the protections for fishers who die while working through the release of compensation from the Workmen's Compensation Fund promptly to the next of kin.

In our interview with the employer, he reflected:

Some equipment on a fishing boat can be very dangerous. Workers need to be extremely careful when they are using all equipment. The falling of the drum of the winch on a worker's head was a severe accident. He was seriously injured, and in the end, he died. As we have made a contribution to the [Workmen's] Compensation Fund, we can claim benefits for the dead worker's family.

Interview, employer of a fisher from Ranong who died at work, 27 August 2019.

The employer then described the compensation scheme:

The family members can choose whether they want to receive a lump sum or a monthly payment for 8 years of compensation. In this case, the father of the dead fisher came from Myanmar to receive half of the lump sum, amounting to THB400,000 (USD13,333) from the Ranong Province SSO. Later, his mother will come to receive the other half when she is healthier and can travel to Thailand. The compensation rate provided by the government is really a good benefit for workers, better than a private insurance scheme. However, I want to convey a message to all sea fishers that you will be adequately protected by your employer and the Thai [Workmen's]

Compensation Fund, even when you have an accident and cannot work any longer, but it is best to protect yourself from any work injuries.

Interview, employer of dead fisher from Ranong, 27 August 2019.

The entire process of benefit claims was completed within one week of the death of the fisher. The prompt action taken by the employer and the officials reflects the effectiveness of the protections that ensure compensation for death of fishers, particularly given the family received the benefits promptly. It also confirms that these social security protections can be received in the migrant worker's country of origin. However, the accident may not have been fatal or even serious if the fisher had been provided with a helmet to protect his head from injuries during the process of net drawing. The requirements for occupational health and safety measures should be obligatory in precarious work. In the PIPO inspection of the fishing vessel, life jackets are checked but no helmet is required. This case reveals that the Labour Protection in Fishing Work Act 2019 can address the curative aspect through compensation. However, preventive measures against accidents in the workplace are not fully covered.

4.2.2. Case study two: Disappearance at sea and failure in compensation claim

In May 2020, a Myanmar fisher fell from a commercial fishing boat in the Gulf of Thailand. After four rounds of searching for him, the skipper reported the incident to the boat owner and to the PIPO Control Center. The fishing vessel owner, who is in the MFCWC with the authors, shared his experience and described the process of assisting a fisher who falls from the vessel while at sea:

We need to follow the guidelines given by the Thai-MECC and the Department of Fisheries. This includes the sea patrol to find the fallen crew member, making urgent contact to the boat owner, to the nearest PIPO Center and making an emergency request to any of the four hotlines of the Department of Fisheries (21C 27.215 MHz), Marine Department (no. 1199), Marine Police (no. 1196) and the Navy Disaster Relief Center (no. 1696). We also need to follow the guidelines to prevent the possibility of falling from the vessel. If a vessel returns to shore with missing crew and did not provide an earlier report of the case of the disappearance to the PIPO Center, the boat owner will be fined, and their fishing license will be revoked. The penalties are very severe. Last month, one of our fishing crews fell and the body could not be found. After many rounds of searching, we finally needed to report to the PIPO. As this is a case of disappearance, according to the law, the family of the fisher who had disappeared had to wait for 180 days before compensation could be made.

Interview, employer of missing fisher in Samut Songkram, 3 June 2022.

Reports of fishers being drunk and using drugs on-board fishing vessels have also been observed [3,34]. Such behaviour can lead to the fisher becoming unstable, falling into the sea and disappearing. When a fisher falls from a fishing vessel, the skippers typically return to rescue them. But if the fisher cannot be seen or in the case of a drowning, if the body cannot be seen floating, the vessel will continue on its path. (This information was taken from an interview with a migrant fisher at MFCWC, 9 August 2019).

An interview with a migrant fisher at the MFCWC revealed more about how fishers can fall off the vessel:

Fishers who fell from the boat usually fell in the morning of the first day of the port out. This is related to their spending leisure time drinking the previous evening.

Interview, migrant fisher at MFCWC, 4 June 2022.

When a fisher disappears, fishing crew members who are friends or

relatives of the fisher who has fallen inform his family about the disappearance. If the fisher has a Myanmar identification card and a copy of their house registration that indicates the name of the next of kin, the documents will be accepted by the SSO, and survivors' benefits can be claimed after a period of 180 days. However, in some cases, fishers do not have the required documents, leading to the loss of survivors' benefits. In addition, the family of a fisher that has disappeared sometimes prefers the employer to report the missing fisher as dead at sea to receive compensation earlier than after 180 days. However, the SSO officer cannot proceed with such a claim without a body. In this case study, the fisher's family had no formal identity documents with the required information to prove their next of kin status to the SSO. Thus, the claim was not be paid at all. The employer offered the parents THB40,000 (USD1212), which is 5% of the THB800,000 (USD27,000) that the SSO usually provides as compensation for survivors' benefit.

The findings from Case Study 2 illustrate the limitations in the protection of fishers who have disappeared at sea by demonstrating that such disappearance can occur and that search efforts can fail and that a lack of specific next of kin information required by the SSO can mean a compensation claim is rejected.

4.2.3. Case study three: Death and disappearance concerns at MFCWC and protection during COVID-19 peak

According to the Labour Protection in Fishing Work Act 2019, each workplace must have a welfare committee. The purpose of the welfare committee is to discuss, inspect and propose recommendations on employees' welfare issues with the employer. The committee should have at least five elected employee representatives [20]. Earlier, a non-governmental organisation working on rights protection pioneered the establishment of a welfare committee in the seafood processing industry [7].

In 2019, the MFCWC was established in Samut Songkram Province comprising three members who were employers, four who were employees (two Thai employees and two Myanmar employees who could speak Thai) and two academics who act as an advisor and a secretary. The meetings of the MFCWC were held during 2019 and 2020. Concerns raised at the meetings included incidents of death and disappearance, prevention and protection relating to death and disappearance, and particularly the delays experienced by families in receiving compensation. The key lesson learned by all parties at MFCWC was that search and rescue should be undertaken and Thai-MECC should be informed immediately when a fisher falls from a boat.

The key obstacle to survivors' benefit claims is the lack of documents required by the SSO. One migrant fisher representative remarked the following:

It is imperative for migrant fishers to have the required formal documents. This information has officially become available in Myanmar within the past two years. So, young fishers who just joined and work in the sea fishing sector have such documents while those who have been working in Thailand for longer than two years do not have them. We need to have all those necessary documents prepared from Myanmar.

Interview, migrant fisher and member of the MFCWC, 4 June 2022.

A Thai skipper reflected on death and disappearance at sea and its causes:

Death and disappearance does not take place very often. I never came across a death and disappearance case on my vessel, and never heard about a Thai death and disappearance incident. The cause of falling into the sea may be the drowsiness of fishers when they go to urinate at the back of the vessel at night. If a death and disappearance happen on board, the skipper needs to inform the vessel owner to report to the Marine Police and request rescue. To prevent a fisher

from death and disappearance, he should wear life jacket at all times. But this is not practical at work because the jacket is cumbersome. Interview, Thai skipper in Samut Sakorn, 2 April 2023.

Social protection for fishers during the COVID-19 pandemic was a concern among migrant fishers in Samut Sakorn and Samut Songkram. The infection rate for the general population in Samut Sakorn was as high as 61,079 people, with 15,171 people who were migrant workers accounting for 33% of the entire number of infections in the province, and 6.3% of the entire migrant population in the town. There were three main responses by fishing vessel operators during the height of the COVID-19 pandemic. First, fishing vessels would go out to fish, so workers continued to be employed. When they returned to shore, the workers had to stay on the boat to protect themselves from being infected, and employers would provide them with food. Second, some fishers, whose employers decided to cease fishing, could borrow money from their employer to live on. Third, some employers decided to terminate employment, in which case, workers could claim 50% of their regular daily wage from the SSO unemployment benefit for up to 90 days [19].

During the pandemic, migrant fishers had the opportunity to raise their concerns and to learn about the process of survivors' benefit claims and its limitations. Employers and skippers were also informed about their role and responsibilities in search and rescue. Similar protection was extended to fishers affected by COVID-19 as was to other Thai workers affected by COVID-19. In addition, the MFCWC provides an avenue for both employers and employees to respond to the challenges of social protections in a positive and effective way to better prevent incidents and facilitate protections for fishers. It can be a platform for fishers' collective bargaining to further protect themselves.

5. Discussion

Findings relating to the death and disappearance of Thai and migrant fishers confirm that death and disappearance at sea are still a challenge in relation to protecting fishers in Thailand from precarity. While the first case study reveals effective protection through timely compensation to the next of kin of a fisher who died at sea, the second case demonstrates ineffective protection because of the limitations of the claims process. The third case study reveals a possible channel of protection through a welfare committee platform where migrant fishers can express concerns with employers about death and disappearance and employment issues such as those occurring during the COVID-19 pandemic. Members of the MFCWC learned about the standard operating procedures in search and rescue, the possible cause of falls and their prevention and the existing inadequacies in the survivors' benefits claim. MFCWC can play a transitional role in protecting migrant sea fishers and providing workers with bargaining power given that there is currently no sea fishers trade union in Thailand. Collective bargaining power is a strong indicator of social protection because it allows workers' concerns to be heard and vulnerabilities addressed [32].

Fig. 1 demonstrates that Thai fishers as well as migrant fishers in Thailand experience death and disappearance vulnerability and therefore suffer from precarity. Information on death and disappearance needs to be collected regularly and systematically to raise awareness. Monitoring the implementation of laws and measures to protect fishers from death and disappearance in Thailand is another important step to understanding whether the implementation of policy meets policy goals. An example of successful implementation is the inclusion of migrant fishers in the SSO. In the past, undocumented migrant fishers were not included in the social security system [14]. Their current inclusion in the SSO reflects a new policy at the regional level as recommended by the ILO [15]. This policy improvement contributes to better protection of migrant workers.

Findings from Case Study 3 indicate that a welfare committee can echo fishers' concerns about death and disappearance, particularly the

limitations of the design of compensation claims. Research has found that the collective bargaining power of workers through a trade union can lead to the transform of working conditions in Thailand [31]. Under the Thai Labour Relations Act 1975, workers can form a union and register with the Office of Labour Relations, but few migrant fishers have joined any kind of formal association [17,23]. There is no trade union for Thai and migrant fishers to join. The Thai Ministry of Labour has drafted a new Labour Relations Act that would allow migrant workers to join as committee members of labour unions. As of 2022, the draft is currently under the review of the Office of the Council of State [10]. Fishers being able to join a trade union should lead to them being better protected.

6. Conclusions

Vandergeest et al. observed that fishing work is challenging to regulate and monitor because it takes place at sea. This is true for migrant fishers in Thailand who experience risks in their working environment. After legal reforms were introduced in the fishing industry, the Thai government introduced initiatives to address the vulnerability of workers. The Labour Protection in Fishing Work Act 2019 covers many aspects of protection, including the relief and prevention of deprivation and the enhancement of the incomes and capabilities of workers [33]. However, the curative stage, which manages compensation and benefit claims for the death and disappearance of fishers, and the transformative stage, which promotes collective bargaining power, are still in progress. The welfare committee model seems to be a possible channel to allow workers to nominate and access representatives and discuss their grievances.

Challenges related to the protection of migrant workers also reflect the different levels of maturity of social protection systems between Thailand and Myanmar; the access barriers; and the limited social protection design and distribution options for migrant workers. The three case studies illustrated the incompatible systems. The Thai protection systems have limited design and distribution options for migrant fishers as mobile populations. These systems should be redesigned in a more flexible way to allow fishers to access protection. With the current design limitations, effective protection of migrant fishers from death and disappearance cannot be attained because implementation at the protective and curative levels has not been fully achieved. More effort is needed to address death and disappearance in the areas of search and rescue; investigation and autopsy; and benefit claims. The forensic process for the identification of dead or missing migrant workers is limited because of the lack of ante-mortem and post-mortem data of the dead or missing person, particularly for illegal workers who have no biometric data [26]. To fill this gap, Thailand is drafting new legislation on forced disappearance to comply with the International Convention for the Protection of All Persons from Enforced Disappearance [29]. When this law is enacted, the protection for missing persons should be up to international standards.

In summary, we make six key recommendations towards ensuring the comprehensive protection of migrant fishers in the Thai fishing industry.

First, the Thai-MECC should take rigorous responsibility for rescuing missing fishers and investigating fishermen who die at sea. It should conduct risk-based inspection of the fishing vessels, monitor fishing crew to ensure they wear life jackets at all times on board, and check the readiness of devices to facilitate search and rescue operations [40]. Transparency and governance in rescue and investigation are important criteria [11,13].

Second, for compensation claims, SSO should revise the design and distribution options to facilitate benefits claim for migrant fishers, particularly those who have been working in Thailand for more than five years.

Third, Thailand's Ministry of Labour should seek cooperation with Myanmar Ministry of Labour to develop more compatible social

protection and information systems that enable migrant workers in Thailand to be fully protected according to the law. These systems should enable the prompt provision of information to surviving next of kin and ensure straightforward procedures so that the next of kin of fishers who have suffered death or disappearance can claim their rightful compensation. The existing Memorandum of Understanding on Cooperation in the Employment of Workers between Thailand and Myanmar should add aspects of work compensation and claims.

Fourth, capacity training and education should be arranged for port officials, PIPO inspectors, vessel operators and employers for cases of death and disappearance according to the guidelines developed by the Department of Fisheries and the International Maritime Organization [39,40]. Fishers should have safety skills training. Police investigations must be timely and accurate with all autopsies undertaken. Migrant's biometric data, which are currently shared between the Immigration Bureau and the Department of Employment, should be shared with the SSO, which processes benefit claims.

Fifth, the Thai Department of Labour Protection and Welfare should fully activate its Labour Protection in Fishing Work Act 2019 to enable the establishment of a welfare committee in the commercial fishing industry. Pilot research and monitoring should be conducted to identify success and limitations in the operation of this act.

Six, Thailand's Ministry of Labour should use blockchain technology to compile, retrieve and share fisher's personal data in the compensation process and in all areas of labour migration management.

CRedit authorship contribution statement

Supang Chantavanich: Conceptualization, Formal analysis, Methodology, Writing - original draft. **Waranya Jitpong:** Data curation, Investigation, Software and Writing - review & editing.

Data Availability

No data was used for the research described in the article.

References

- [1] Asian Research Center for Migration. 2021. White Paper: From IUU Fishing to Sustainable Fisheries, progress and recommendations. Institute of Asian Studies Chulalongkorn University. https://998c0923-e8f6-409a-b932-7cab4d998508.filesusr.com/ugd/7efcb5_5_967a4ad092f4cefac78b845bc3d4b3a.pdf (in Thai).
- [2] P. Bourdieu, Acts of Resistance, Polity Press, Cambridge, 1998. (<http://digamo.free.fr/bourdieu98.pdf>).
- [3] Bundale, B. 2019. Already the most dangerous profession, fisheries facing an increasing drug-use problem. SaltWire Business. <https://www.saltwire.com/nova-scotia/business/already-the-most-dangerous-profession-fisheries-facing-an-increasing-drug-use-problem-364541/>.
- [4] Chantavanich, S. Laodumrongchai, S. Harkins, B. Jitpong, W. Yothinneeeranath, P. Tunon, M. Olsen, A. 2013. Employment Practices and Working Conditions in Thailand's Fishing Sector. ILO Regional Office for Asia and the Pacific, Bangkok. (<http://hdl.voced.edu.au/10707/268336>).
- [5] S. Chantavanich, S. Laodumrongchai, C. Stringer, Under the shadow: forced labour among sea fishers in Thailand, Mar. Policy 68 (8) (2016) 1–7, <https://doi.org/10.1016/j.marpol.2015.12.015>.
- [6] Chantavanich, S. Vungsiriphal, P. Laodumrongchai, S. 2007. Thailand Policies towards Migrant Workers from Myanmar, Asian Research Center for Migration, Bangkok.
- [7] Charoensuthipant, P. 2016. Migrants get voice in welfare committees. Bangkok Post. (<https://www.bangkokpost.com/thailand/general/1020685/migrants-get-voice-in-welfare-committees>).
- [8] C.S.O. Coalition. 2018. Falling through the net: a survey of basic labour rights among migrants working in Thailand's fishing sector. CSO Coalition for Ethical and Sustainable Seafood. (<http://ghre.org/2018/05/21/cso-coalition-falling-through-the-net/>).
- [9] Department of Employment. 2022. Annual Statistics of Registered Migrant Workers in Thailand. https://www.doe.go.th/prd/assets/upload/files/alien_th/9179886c93a63ab32_eb02d31557See11.pdf. Ministry of Labour, Bangkok.
- [10] Department of Fisheries. 2022. Thailand's Progress on Combatting IUU Fishing and Labor Issues towards Fisheries Sustainability. (https://www4.fisheries.go.th/dof/en/view_news/426).
- [11] A.J. Garcia Lozano, J.L. Decker Sparks, D.P. Durgana, C.M. Farthing, J. Fitzpatrick, B. Krough-Poulsen, G. McDonald, S. McDonald, Y. Ota, N. Sarto, A.M. Cisneros-Montemayor, G. Lout, E. Finkbeiner, J.N. Kittinger, Decent work in fisheries:

- current trends and key considerations for future research and policy [104922], Mar. Policy 136 (2022), <https://doi.org/10.1016/j.marpol.2021.104922>.
- [12] Guardian, The. 2017. Thailand accused of failing to stamp out murder and slavery in fishing industry. (<https://is.gd/FL0U8w>).
- [13] J. Harrison, International transparency obligations in fisheries conservation and management: Inter-state and intra-state dimensions, Mar. Policy 136 (2022), <https://doi.org/10.1016/j.marpol.2021.104922>, 104922.
- [14] International Labour Organization, Ship to Shore Rights: Baseline Research Findings on Fishers and Seafood Workers in Thailand, ILO, Bangkok, 2018. (https://www.ilo.org/wcmsp5/groups/public/-asia/-ro-bangkok/-sro-bangkok/documents/publication/wcms_619727.pdf).
- [15] International Labour Organization. 2018. Social protection for migrant workers in ASEAN: Development, challenges, and prospects. (https://www.ilo.org/asia/publications/WCMS_655176/lang-en/index.htm).
- [16] International Labour Organization. 2019. Better labour inspection cuts abuses in the Thai fishing sector. (https://www.ilo.org/global/about-the-ilo/mission-and-objectives/features/WCMS_724780/lang-en/index.htm).
- [17] International Training Centre. 2015. Country Report: Thailand Trade Union Organizing Strategies for Development and Inclusion 20–31 July 2015, Turin, Italy. (http://actrav-courses.itcilo.org/a3-08184/a3-08184-part-material/country-report-serc-thailand/at_download/file).
- [18] Kasmir, S. 2018. Precarity. Cambridge Encyclopedia of Anthropology. <http://doi.org/10.29164/18precarity>.
- [19] Khemanitthathai, S. 2021. Situation on Migrant Workers and Border Crossing During the Covid-19 Pandemic. Migrant Working Group. (<https://mwgthailand.org/en/press/1643810841>).
- [20] Labor Protection Act (No.7) 2019 (2019, 05 April). Royal Thai Government Gazette. No.136. http://www.ratchakitcha.soc.go.th/DATA/PDF/2562/A/043/T_0021.PDF (in Thai).
- [21] Labor Protection in Fishing Work Act 2019 (2019, 22 May). Thai Government Gazette. No. 136. (http://web.krisdika.go.th/data/document/ext856/856808_0001.pdf).
- [22] Labor Protection Network. 2018. Combat Human Trafficking: Multi-stakeholders Initiative for Accountable Supply Chain of Thai Fisheries (MAST). (<https://www.masthuman.org/>).
- [23] Labor Relations Act 1975 (1975, 22 February). Thai Government Gazette. No.92. (<http://www.ratchakitcha.soc.go.th/DATA/PDF/2518/A/047/1.PDF>). (in Thai).
- [24] M. Marschke, P. Vandergeest, E. Havice, A. Kadfak, P. Duker, I. Isopescu, M. MacDonnell, COVID-19, instability and migrant fish workers in Asia, Marit. Stud. 20 (2021) 87–99, <https://doi.org/10.1007/s40152-020-00205-y>.
- [25] Ministerial Regulation on Labor Protection in Fishing Works 2022. (2022, 10 March). Thai Government Gazette. No.139. http://www.ratchakitcha.soc.go.th/DATA/PDF/2565/A/016/T_0006.PDF. (in Thai).
- [26] R. Mornmoung, Identification of unidentified migrant workers' dead in Thailand, J. Thai Ombudsman 2 (2021) 199–227. (<https://so04.tci-thaijo.org/index.php/ombudsman/article/view/251208/173501>).
- [27] Na Thalang, J. (2015). The graveyard of fishermen. Bangkok Post. (<https://www.bangkokpost.com/thailand/special-reports/511034/the-graveyard-of-fishermen>).
- [28] Nanuam, W. (2019). Maritime body restructured to tackle IUU. Bangkok Post. (<https://www.bangkokpost.com/thailand/general/1749594/maritime-body-restructured-to-tackle-iuu>).
- [29] National Human Rights Commission. Thailand. Newsletter (10) (2021). (in Thai).
- [30] National Police Agency. 2022. Press Release on Migrant fishers reported as dead and disappeared at sea in Thailand 2020–2022. (<https://is.gd/vew1a1>). (in Thai).
- [31] Rogovin, K. 2020. Time For a Sea Change: why union rights for migrant workers are needed to prevent forced labor in the Thai seafood industry. International Labor Rights Forum. (https://laborrights.org/sites/default/files/publications/ILRF_TimeforaSeaChange.pdf).
- [32] R. Sabates-Wheeler, Social Protection, Development, and Migration: challenges and prospects. Routledge Handbook of Migration and Development, Taylor et Francis Group, London; New York Routledge, 2020.
- [33] Sabates-Wheeler, R. Waite, M. 2003. Migration and Social Protection: A concept paper. Development Research Centre on Migration, Globalisation and Poverty, University of Sussex. Brighton. (<https://documents.net/document/migration-and-social-protection-a-concept-migration-and-social-protection.html?page=1>).
- [34] Safety4Sea. 2022. Drug-taking on fishing vessels is a major challenge. (<https://safety4sea.com/drug-taking-on-fishing-vessels-is-a-major-challenge/#:~:text=According%20to%20the%20reporter%2C%20an,are%20being%20paid%20in%20cocaine>).
- [35] Schierup, C. Jorgensen, M. (editor). 2018. Politics of Precarity: Migrant Conditions, Struggles and Experiences. Haymarket Books, Chicago.
- [36] P. Siamphan, R. Trirath, Impacts of the COVID-19 pandemic on small-scale producers and workers: perspectives from Thailand's seafood supply chain, Oxfam (2020), <https://doi.org/10.21201/2020.6225>.
- [37] C. Stringer, D.H. Whittaker, G. Simmons, New Zealand's turbulent waters: the use of forced labour in the fishing industry, Glob. Netw. 16 (1) (2015) 3–24, <https://doi.org/10.1111/glob.12077>.
- [38] C. Stringer, A. Kartikasari, G. Henderson, Co-creating changes to achieve decent work conditions in the New Zealand fishing industry, Glob. Soc. Policy 22 (2) (2021) 281–302, <https://doi.org/10.1177/14680181211026182>.
- [39] The Environmental Justice Foundation. 2015. Thailand's Sea food Slaves, Human Trafficking, Slavery and Murder in Kantang's Fishing Industry. (<https://ejfoundation.org/resources/downloads/EJF-Thailand-Seafood-Slaves-low-res.pdf>).
- [40] The Environmental Justice Foundation. 2020. Thailand's progress in combating IUU, forced labour & human trafficking: Observations and Recommendations. EJF 8, spring). (<https://ejfoundation.org/resources/downloads/EJF-tech-report-spring-2020-EN.pdf>).
- [41] UCA news. 2021. Death at sea: Thai slave masters show no mercy. (<https://www.ucanews.com/news/death-at-sea-thai-slave-masters-show-no-mercy/92491>).
- [42] P. Vandergeest, M. Marschke, Beyond 'slavery scandals': explaining working conditions among fish workers in Taiwan and Thailand, Mar. Policy 132 (2021), 104685, <https://doi.org/10.1016/j.marpol.2021.104685>.
- [43] Workmen's Compensation (No. 2) Act B.E. 2561. (2018, 10 October). Thai Government Gazette. No.135. http://www.ratchakitcha.soc.go.th/DATA/PDF/2561/A/080/T_0001.PDF (in Thai).
- [44] J. Yang, The Political Economy of the Small Welfare State in South Korea, Cambridge University Press., New York, 2017, <https://doi.org/10.1017/9781108235419>.