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Competency of fishing boat crew from Indonesia in the framework of standards of training, certification, and watchkeeping for fishing vessel personnel 1995 (STCW-F 1995)

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Abstract. Fishing boat crews worked on foreign fishing vessels to obtain competency standards to be internationally qualified human resources. Currently, Indonesia has a limited number of certified fishing boat crews that are internationally recognized. Hence, the Indonesian government has ratified Training, Certification, and Watchkeeping for fishing vessel personnel (STCW-F 1995) to make Indonesian fishing boat crews compete globally. This research aims to examine government policy in creating strategies to improve the ability of Indonesian fishing boat crews by education and training to be able to work on foreign fishing vessels. This research employs the juridical empirical method with a case study approach, and it is then analyzed descriptively. The results show that: 1) there were overlapping regulations on guidelines for fishing boat crews on foreign vessels; 2) sectoral egocentrism towards the implementation authority on education and training for fishing boat crews. Therefore, the government needs to formulate a legal guideline to be referred by all parties. This legal guideline may lead the highest Indonesian authority to take political steps on assigning the Ministry of Marine Affairs and Fisheries as the authorized institution to carry out education and training for fishing boat crews.

1. Introduction

Since entering the decade of 1980, economic globalization has had a significant influence on world job competition. The era of globalization as an era without more unrestricted freedom for human resources is marked to enter other countries by offering their expertise [1,2]. This era is a challenge for each country to compete to create quality world human resources and Indonesia. The government as the policymaker responded by making one of the visions of "Human Resource Development" in the National Medium Term Development Plan 2020-2024. The primary program used as the basis for achieving this vision is to create superior human resources. Superior is defined as competent or best [3]. The key to the nation's competitiveness in achieving this is adding skills to increase competence and compete with other countries.

The foundation of the government for making this program is related to the fact that the competitiveness of human resources as Indonesian workers still needs to be improved—the competitiveness as productivity defined as the output produced by labor [4]. Interpreting labor as the

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meaning of human capital can make Indonesia able to compete at the world level. One of the sectors that require an increase in the competence of its workforce is the marine and fisheries sector. The policy of preparing a workforce in this sector that is ready to use and by the demands of global change must be a strategic priority to achieve the nation's progress. The effort made by the government is to publish Peraturan Presiden Republik Indonesia Number 18/2019, about International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995 (Konvensi Internasional tentang Standar Pelatihan, Sertifikasi, dan Dinas Jaga bagi Awak Kapal Penangkap Ikan, 1995)/SCTW-F 1995. The International Maritime Organization (IMO) was enforced STCW-F 1995 on 29 September 2012, after being ratified a year earlier by the countries Canada, Congo, Denmark, Iceland, Kiribati, Latvia, Lithuania, Mauritania, Morocco, Namibia, Norway, Palau, Russia, Sierra Leone, Spain, Syria, and Ukraine [5].

The STCW-F 1995 Convention is significant for Indonesia, especially in promoting protection, improving quality and competitiveness standards, and managing fishing vessels in Indonesia [6]. Crew members work or are employed on board by the shipowner or operator to perform tasks on the ship following their position as stated in the certificate book [7]. The crew of the ship is needed to operate and ensure the smooth operation of the fishing business. The SCTW-F 1995 Convention was established to increase the safety of life and property at sea and protect the marine environment by establishing international training, certification, and watch service for people on board fishing vessels [8]. SCTW-F 1995 regulates education and training standards, crew certification, and guard duties on fishing vessels. Certification stipulated in the STCW-F 1995 Convention is intended for crew members serving on fishing vessels with a length of 24 meters or more operating in confined and unrestricted waters.

The interests of the government to ratify the SCTW-F 1995 Convention are 1) to improve the quality of fishing vessel crews so that they can be recognized internationally; 2) obtaining international recognition of fishing vessel crew certification issued by Indonesia with wages and facilitation according to competence; 3) increase the competitiveness of fishing vessel crews through improving education and training standards that can expand employment in the international job market. The quality of Indonesian crew members, especially in the fisheries sector, can compete globally. However, many do not have the competency certificates needed to work on foreign flag fishing vessels—increasing competence to create quality human resources in the marine and fisheries sector. Competence can provide benefits to the country's foreign exchange.

2. Methods

The research was conducted in 2021, with research locations in Tegal City (Central Java) and Sukabumi Regency (West Java). Tegal City was chosen because it represents a competency test related to education and training held by the Fisheries Training and Extension Center (BP3) under the Ministry of Marine Affairs and Fisheries (MMAF). Sukabumi Regency became a research location because it represented formal education at the Vocational School level, for which most graduates were fishermen's crew. These two locations also have the potential for human resources as workers who work as fishing boat crews on foreign-flagged vessels.

The types of data used in this study are primary and secondary. Primary data focuses on extracting information from parties who know about the certification required for marine crews working on ships with foreign flags. Secondary data sources are written information (online news), scientific research, and secondary legal materials (international and national regulations) related to the discussion. Secondary legal materials are all information regarding regulations that have been passed or have been in effect and all information relevant to juridical issues [9]. Data collection techniques are carried out through:

- Interview method using the data topic with the key informant.

Interviews with the key informant are the process of obtaining information for research purposes using face-to-face questions and answer between the interviewer and the interviewee/person (with or without using the interview guide) [10].

doi:10.1088/1755-1315/860/1/012088

- Focus Group Discussion (FGD)

The term FGD is a small group discussion guided by a trained leader. This discussion gives the knowledge to learn opinions about a specified topic and guide future action [11]. The FGD has a function to obtain the input and views of decision-makers involved in water management in the EEZ area, both as implementers, affected parties, and observers.

- Literature review

The literature review is a survey of books, scientific articles, and other sources relevant to a specific issue, area of study, or theory, which in doing so can provide a description, summary, and critical evaluation of these works concerning them with research problems that are being carried out [12].

The analysis used for the competence of Indonesian fishing boat crews in the SCTW-F 1995 framework uses the method:

- Juridical empirical with a case study approach
 This method is needed to review the supporting national regulations and the practice in the EEZ region. Interpretation of legal rules regarding EEZ and national regulations to distill the policy's meaning.
- Qualitative descriptive

This method is needed to reveal facts, circumstances, phenomena, variables, and circumstances that occurred during the research by presenting what happened. Qualitative descriptive has the concept of a) interpreting and describing data related to the current situation; b) attitudes and views that occur in a society; c) conflict between two or more conditions; d) the relationship between variables that arise; e) differences between existing facts and their effect on a condition [13].

2.1 Fishing Boat Crew Recruitment and Placement System

The potential of fishery resources which is quite significant in several countries, now has opened up jobs for workers to become crew members on fishing vessels. Foreign companies recruit workers as crew of fishing boats to become crew members of ships and other jobs. The International Labor Organization (ILO) has identified commercial fishing as a hazardous occupation with a severe accident and death rate in the world. The work on this fishing vessel carries a high risk because a) it is at sea with unpredictable weather conditions; b) is dirty due to dealing with perishable fish; c) using a variety of fishing gears, d) There are not fix fishing locations, e) the coverage area is vast (beyond the territorial boundaries of a country and the high seas) [14].

The crew of fishing boats is the absolute owners of universally recognized human rights, which their rights, dignity, and security must protect. Excellent and precise recruitment and placement process are necessary to protect the rights and decent working conditions of fishing vessels. Recruitment and placement of workers as the crew of fishing vessels must pay attention to 1) minimum requirements to work on ships; 2) standard terms of service; 3) accommodation and food; 4) protection of occupational health and safety; 5) health care and social security for children with special needs with protection packages according to international standards. The Indonesian fishing industry is still very vulnerable to trafficking in persons, especially in the recruitment process.

Labor fishers who work for companies or shipowners struggle with wages, exploitation, initial debt (cash receipts), and debt bondage. The Indonesian fishing industry is still very vulnerable to trafficking in persons, especially in the recruitment process, with the wage model and working conditions on board fishing boats. The risk of exploitation exists as a result of the informal recruitment system. In many cases, appropriate legal frameworks to protect fishing boat crews exist but have not been implemented and enforced. In some cases, there is low law compliance and intended [15]. Tegal coastal fishing port officials said that the recruitment process for ship crew or fishers who work on fishing vessels is informal (interview, 08/04/2021). According to fisheries extension workers in Sukabumi Regency, trust becomes the primary recruitment model (interview, 21/04/2021). Officials of the Indonesian Migrant Worker Protection Agency, when ship harbor, random and spontaneous recruitment of crew members of fishing boats happen (interview, 20/04/2021).

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Officials of the Office of Marine Affairs and Fisheries in Sukabumi Regency explained that brokers act as liaison agents between prospective workers and the captain or shipowner. Captain, shipowner, and companies using the brokerage services for recruitment (interview, 22/04/2021). Fee for brokerage services constantly burdens ship crew and labor fishers. Besides fees for brokerage services, there are expenses for accommodation or living expenses during the waiting process, including transportation from home/hometown to the ship and vice versa. The Sukabumi City Fisheries Vocational High School teacher revealed that all fees are borne and included in the salary scheme. This bailout debt continues to increase and often turns into a debt trap. This condition forces fishing boat crews on foreign ships to work hard to pay off their debts (interview, 23/04/2021).

Officials from the Tegal Fisheries Training and Extension Center explained that most of the crew members of fishing vessels abroad have zero experience in the fishing industry. Most of them almost certainly never had experience working as small-scale or traditional fishermen (interview, 09/04/2021). Officials of the Sukabumi Regency Maritime and Fisheries Service also said that not all fishing boat crews who work abroad are fishermen (working as farmers). They joined fishing boats due to difficult economic conditions and persuasion by sponsors who promised to work abroad with reasonable remuneration and work on fishing boats (interview, 22/04/2021). Informal recruitment usually involves using a fake passport by an informal agent. These things happen because Indonesian workers can work aboard fishing vessels with foreign flags. This forgery to obtain the required training documents. Workers who use fake documents as the crew of fishing boats, on average, have inadequate knowledge and understanding of the risks of their work. This condition worsens because of ignorance in understanding the use of a life jacket (life vest). Limited experience and knowledge of working abroad cause them to realize that the job risks faced are enormous, and they do not have the option to refuse [16].

During the period 2018-13 May 2020, the Indonesian Migrant Worker Protection Agency received 411 complaints from Indonesian fishing boat crews (ABK) working on foreign fishing vessels, with the highest complaint being unpaid wages (44% or 183 cases). BP2MI noted that this type of complaint occurred because some of the complainants were fishing boat crews who came from non-procedural routes, making them more vulnerable to work agreement violations and exploitation. Other problems include working hours, accommodation, inhuman working conditions, physical and psychological torture, and overexploitation [17]. Manning agencies for Indonesian fishing boat crews abroad also contribute to labor violations, especially at the recruitment stage and when the work contract ends. During recruitment, manning agencies often provide prospective Indonesian workers with incorrect information about their offered jobs. The International Organization for Migration (IOM) accounts that 71% or 202 of 283 Indonesian crew members must pay recruitment fees. This condition shows that 176 of the 202 people who paid the recruitment fee were obliged to sign a debt contract before departure, while the other 29 victims had to pay a recruitment fee of US\$ 2,000-US\$ 4,000 to the manning agency [18].

The results of the study came from the results of tracing IOJI data (2021), FGD in Tegal City (09/04/2021), as well as the results of interviews with 1,) Officials of the Indonesian Migrant Worker Protection Agency (20/04/2021); 2) officials of the Sukabumi Regency KP Office (22/04/2021), Tegal City fishery extension workers (11/04/2021), teachers of the Fisheries Vocational School, Sukabumi Regency (23/04/2021); Fisheries extension workers in Sukabumi Regency (22/04/2021) indicated that:

- The inadequate legal protection for Indonesian fishing boat crews on foreign-flagged fishing vessels and weak government oversight of manning agencies have contributed to many labor violations, forced labor practices, and human trafficking.
- An implementing regulation in the form of a Minister of Manpower Regulation regarding the placement and protection of Indonesian crew members no become a national issue priorities
- has never been issued.
- Government regulations regarding the placement and protection of sailors for crew members and fisheries seafarers and supervision of the implementation of the placement and protection of Indonesian Migrant Workers need to be exhaustive.

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- Overlapping authority in issuing agency permits for recruitment and placement of fishing boat crews (manning agency). Types of permits for the placement of Indonesian workers as crew on foreign fishing vessels:
 - 1. Manning agency that has a Business License for the Recruitment and Placement of Ship Crew from the Ministry of Transportation,
 - 2. Manning agencies that have Indonesian Migrant Worker Placement Company Permits from the Ministry of Manpower and Indonesian Migrant Worker Recruitment Permits from the Indonesian Migrant Worker Protection Agency,
 - 3. Manning agency has a Trade Business License from the Ministry of Trade or the Trade Office at the Regional Government.
 - 4. 4. There is no single database containing information on domestic and foreign manning agency data, the number of Indonesian fishing boat crews on foreign fishing vessels, and foreign fishing boat owners. This condition results in the uncertainty of the number of Indonesian workers as fishing vessels abroad, making it difficult to protect them.

Officials of the Indonesian Migrant Worker Protection Agency said that there were still manning agencies that carried out non-procedural placements (interview, 20/04/2021). In practice, a letter of guarantee becomes the non-procedural placement of fishing boat crews. Consequently, the fishing boat crew become unregistered workers by Indonesia or the country of placement.

2.2 Competency Certification for Fishing Boat Crews

Increasing the competency standard of fishing vessel crews is one of the main factors in improving the crew's safety, vessels, and cargoes. Standards of crew competency are one of the ship requirements that can operate. A sailing permit cannot be issued if the crew competency certificate does not meet the applicable conditions. Every seafarer who works on a fishing vessel must have a qualification of expertise or skills proven by a certificate. A seafarer is any person who has a classification of expertise and skills as a ship crew [19]. Article 6 contains the primary substance of STCW-F 1995 (Attachment I), which states that fishing boat crews must be certified following the provisions in the attachment to this convention. These certifications include:

- a. Certification of skippers with a length of 24 meters or more operating in open water
- b. Certification of navigator officers with a length of 24 meters or more operating in open water.
- c. Certification of skippers with a length of 24 meters or more operating in confined waters.
- d. Certification of navigator officers with a length of 24 meters or more operating in confined waters.
- e. Certification engines fishing boat with a power of 750 KW or more.
- f. Certification of radio officers on a fishing boat or Global Maritime Distress and Safety System (GMDSS)

The skills and capabilities of fishing boat crews have been certified. That competency is required to be updated and improved. All fishing boat crews are required to attend basic safety training under applicable regulations. Competency certification is issued through a skill test and confirmation certificate for fishery seafarers after having experience on a fishing boat issued through an inauguration exam by a competent institution. Standardization of quality fishing boat crews is compulsory through education and training following training, certification, and guard duty, as specified in the 1995 STCW-F convention. This phase means that the teaching and learning process and its facilities in providing education and training for fishing boat crews must comply with the convention's provisions. Certificate of Proficiency/COP consists of Fishing Vessel Nautical Expert (ANKAPIN) for deck officers and Level Fishing Vessel Technician (ATKAPIN) for engine officers [20]. Each crew member must have a maritime certificate.

Ship crews and non-ship officers are required to have a BST certificate and a seaman's book. Crew members with the position of deck officer are required to have an ANKAPIN certificate and an ATKAPIN certificate for engine officers. The ANKAPIN and ATKAPIN certificate level of an officer must be under the classification of the ship based on the length of the ship, GT (Gross Tonnage), and the area of operation [21]. Referring to this, the government must take decisive steps in fulfilling the

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competency needs of human resources by the required qualifications, both through formal and informal education and training. This must-have certificate is one of the efforts to guide and develop human resources to create professional (competent/skilled, character and independent) crew/sailors. Planning for the development of human resources for fishery boat crews is based on the principle of assigning them to tasks tailored to the qualifications/expertise or skills concerned.

Certificate of competence as an obligation to guarantee shipping safety as a support for the smooth traffic of ships at sea. The institution that has the authority to provide education and training for fishing boat crews is MMAF. This is based on the issuance of Peraturan Pemerintah Republik Indonesia Nomor 75 Tahun 2015, tentang Jenis dan Tarif atas Jenis Penerimaan Negara Bukan Pajak yang Berlaku pada Kementerian dan Kelautan. The purpose of this regulation is as a source of revenue to optimize state revenue to support national development. Non-Tax State Revenue sourced from MMAF related to education and training includes 1) Basic Safety Training Program; 2) Proficiency in Survival Craft and Rescue Boats Other Than Fast Rescue Boats; 3) Advanced Fire Fighting; 4) Medical First Aid [22].

The Directorate General of Capture Fisheries-MMAF's official revealed that the implementation of education and training for fishing boat crew skills becomes the overall responsibility of the Marine and Fisheries Research and Human Resources Agency. Certificate of competency in education and training organized by the Marine and Fisheries Research and Human Resources Agency-MMAF, the authority of which is issued by the Ministry of Transportation. The new government policy is currently changing the system that education and training overall held the Marine and Fisheries Research and Human Resources Agency, but the Directorate General of Capture Fisheries-MMAF issues certificates. This discourse is still in the discussion stage to determine the appropriate scheme for its implementation (interview, 29/03/2021).

The teaching staff at the Fisheries Vocational School, Sukabumi Regency, said that the Korean state only recognized the ANKAPIN certification issued by the Indonesian government authorities. This certification can be raised to an international level if the fishing boat crew takes ANT (Nautical Expert) education and training, which the Ministry of Transportation holds. The cost of obtaining international certification is approximately 12 million rupiahs (an increase in the ANT level is carried out every two years at the cost of approximately 30 million rupiahs) (interview, 23/04/2021). The provider of education and training to get an ANT certificate is the Makassar Shipping Science Polytechnic. This polytechnic is a university under the Ministry of Transportation that provides human resources in the shipping sector with the ability, knowledge, and skills with international standards [23].

Officials of the Tegal Fisheries Training and Extension Center explained that education and training to obtain competency certificate because of the IMO mandate, guided by the SCTW-F 1995. National Professional Certification under the authority of the Ministry of Manpower; 2) international; 3) particular standards. The training and education system must be improved according to the applicable standards to increase fishing boat crews' capability significantly. Language skills for fishing boat crews who will work on foreign-flagged vessels must also be improved (interview, 09/04/2021).

3. Conclusion

The results of a study on the Competency of Fishing Boat Crew from Indonesia in The Framework of SCTW-F 1995 show that there are still overlapping interests between agencies related to recruitment and placement and the authority to organize education and training to obtain certification when working on a foreign flagship. Based on this, in order to manage the recruitment, placement, education, and training system, workers who are crew members of fishing vessels on foreign-flagged vessels need an action plan as follows:

1. The firmness of the President of the Republic of Indonesia in determining the agencies that can recruit and place a crew of Indonesian fishing vessels is the Ministry of Manpower and the Indonesian Migrant Worker Protection Agency.

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- 2. The Indonesian Migrant Worker Protection Agency must improve the integrated database of Indonesian Migrant Workers, especially ship crews working on ships with foreign flags. The Ministry of Manpower can use this database, the Ministry of Foreign Affairs, and local governments to coordinate supervision from before departure to return.
- 3. The President of the Republic of Indonesia have to take a firm stance to reorganize the dualism of authority in administering education and training in increasing the competence of fishing boat crews to become one door (MMAF). This assertiveness including in governance within the MMAF itself.
- 4. The Marine and Fisheries Research and Human Resources Agency and other technical directorates should arrange for education and training providers. This consideration is based on the main tasks and functions of the Marine and Fisheries Research and Development Agency to provide education and training through its work unit.

References

- [1] Rivai V 2009 Human resource management for companies (Jakarta: Rajawali Pers)
- [2] Yoshino K and Kawaguchi T 2020 Farming in Fishing Communities in Japan Case Study in the Sanriku Region *J. Asian Rural Stud.* **4** 98
- [3] Ministry of Education 2008 *Indonesian dictionary* (Jakarta: Ministry of Education)
- [4] Porter M E 2001 Competitive advantage (Jakarta: PT. Indeks Kelompok Gramedia)
- [5] Maritim 2019 SCTW-F 1995, Competency Standards for Fishing Vessels [In Bahasa Indonesia]
- [6] Directorate General of Arrest 2019 Indonesia Ratifies the International Convention on Standards for Training, Certification and Guard Service for Crews of Fishing Vessels (Jakarta: Directorate General of Arrest)
- [7] Law of the Republic of Indonesia Number 17 of 2008, concerning Shipping. State Gazette of the Republic of Indonesia of 2008 Number 64. Supplement to the State Gazette of the Republic of Indonesia Number 4849
- [8] Presidential decree Draft Presidential Regulation of the Republic of Indonesia concerning Ratification of the International Convention on Standards of Training, Certification, and Watchkeeping for Fishing Vessel Personnel, 1995 (Jakarta)
- [9] Wignjosoebroto S 2002 Law (Paradigm, method and dynamics of the problem) [In Bahasa Indonesia] (Jakarta: ELSA dan HUMA)
- [10] Sutopo H B 2006 *Qualitative research methods* (Surakarta: UNS Press)
- [11] Kansas University Community Tool Box 2016 Conducting Focus Groups
- [12] Fink A 2020 Conducting research literature reviews from the internet to paper (California: SAGE Publications, Inc)
- [13] Prasetyo A 2016 Definition of qualitative descriptive research
- [14] Suwardjo D, Haluan J, Jaya I and Poernomo S H 2010 Study on fatal accident rates, prevention and mitigation of accidents on fishing vessels based on operations at PPP Tegalsari, PPN Pekalongan, and PPS Cilacap *J. MARITEK-Teknologi Perikan. Kelaut. Univ. Pertan. Bogor* 10 61–72
- [15] Darilaut 2019 Exploitation in Indonesian fishery business [In Bahasa Indonesia]
- [16] Ambari M 2020 How to manage the proper management of fishing vessel crews? [In Bahasa Indonesia]
- [17] Indonesian Migrant Workers Protection Agency 2020 The role of the government in the placement and protection of Indonesian migrant workers on foreign fishing vessels *The Indonesia Ocean Justice Initiative: Protection of Indonesian Crew on Foreign Fishing Vessels*
- [18] Indonesia Ocean Justice Initiative 2020 Improved governance of the protection of Indonesian crew members on foreign fishing vessels (Policy Brief 3) (Jakarta: Indonesia Ocean Justice Initiative)
- [19] Government Regulation of the Republic of Indonesia Number 7 of 2000, concerning Marine

doi:10.1088/1755-1315/860/1/012088

- Affairs. State Gazette of the Republic of Indonesia Year 2000 Number 13. Supplement to State Gazette of the Republic of Indonesia Number 3929
- [20] Regulation of the Minister of Transportation of the Republic of Indonesia Number KM 9 of 2005, concerning Education and Training, Certification Exams for Fishing Vessels. Established in Jakarta, January 27th, 2005
- [21] Budiman M S, Iskandar B H and Seboer D H 2016 Arrangement of competency certification for fishing vessel crews in Indonesia *J. Teknol. Perikan. dan Kelaut.* 7 146–52
- [22] Government Regulation of the Republic of Indonesia Number 75 of 2015, concerning Types and Tariffs of Non-Tax State Revenues Applicable to the Ministry of Maritime Affairs and Fisheries. State Gazette of the Republic of Indonesia Year 2015 Number 225
- [23] Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 1 of 2018, concerning Service Standards at the Makassar Shipping Science Polytechnic. State Gazette of the Republic of Indonesia Year 2018 Number 107