

Optimizing Fishermen's Administrative Completeness through Vessel Measurement Outreach to Improve the Welfare of Coastal Communities in Arowi Village

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Article Info	Abstract
<p>Article history: Accepted: 16 April 2026 Publish: 13 Juni 2026</p> <hr/> <p>Keywords: Small Pas (E-Pas Kecil); Vessel Legality; Fishermen; Arowi Village; KSOP.</p>	<p><i>Arowi Village in Manokwari Regency possesses abundant marine resource potential; however, the welfare of its fishermen remains hindered by administrative constraints and limited access to government assistance. Most traditional fishermen in this region do not yet possess legal vessel documents, which serve as the primary prerequisite for accessing fuel subsidies, insurance, and infrastructure assistance. This Community Service Program (PKM) aims to raise legal awareness and provide technical assistance through vessel measurement outreach for the issuance of Small Pas (E-Pas Kecil) certification. The method employed is a participatory approach involving face-to-face outreach, interactive discussions, and on-site vessel measurement demonstrations conducted by the team from the Class IV Manokwari Harbor Master and Port Authority Office (KSOP). The results show a significant increase in fishermen's understanding of the urgency of vessel legality in accordance with Law Number 17 of 2008 concerning Shipping. Of the 42 fishermen in attendance, 25 vessel units were successfully measured and had their administrative documents processed for the issuance of E-Pas Kecil. The outcomes of this service program provide legal certainty for fishermen, ensure shipping safety, and open accessibility to various sustainable coastal economic empowerment programs.</i></p>

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1. INTRODUCTION

Indonesia is the world's largest archipelagic country, with a sea area of 6.4 million km² and a coastline of 108,000 km. As a maritime nation, the marine and fisheries sector is a primary pillar of national development, expected to make a significant contribution to community welfare, particularly for coastal communities. Arowi Village, located in East Manokwari District, Manokwari Regency, West Papua Province, is a coastal area whose landscape directly faces the open sea. This strategic geographical condition makes the fisheries sector the economic backbone of the area, where fishing is the main livelihood for most of its residents. The abundant marine wealth and productive coastal ecosystem are genuinely valuable natural

resource assets with great potential to sustain and improve the economic standard of living of the local community.

Despite possessing abundant natural resource potential, the fishing community in Arowi Village still faces multidimensional challenges that hinder improvements in their standard of living. One of the main identified obstacles is the low penetration of technology and digital literacy in the capture fisheries sector. In the current era of modernization, the use of fishing aids such as navigation Global Positioning System (GPS) devices should be a standard for fishermen to improve operational effectiveness. However, the reality on the ground shows a paradox; some fishermen who have received GPS assistance from the government are unable to operate it optimally due to a lack of technical knowledge and the absence of a sustainable mentoring program. As a result, equipment that should improve catch results instead becomes nothing more than a display item without economic benefit.

On the other hand, the issue of unequal distribution of assistance is a crucial issue that triggers social and productivity gaps in Arowi Village. There is segmentation among fishermen, where certain groups have access to government facilities, while other traditional fishermen have not been touched at all by equipment or capital assistance schemes. These traditional fishermen continue to rely on conventional methods and natural instinct in finding fish, which in the long run leaves them far behind in terms of production volume compared to fishermen who have already been touched by modernization. If left unaddressed, this productivity gap will widen the poverty divide and hinder overall poverty alleviation efforts in coastal areas.

The root of this unequal distribution of assistance is often administrative in nature. Based on shipping administration regulations in Indonesia, every sea transportation vessel, including fishing vessels of a certain size, is required to have legal identity in the form of vessel measurement documents and safety certification. Without official documents such as the Small Pas (E-Pas Kecil), a fisherman is formally and legally considered not to have a registered business unit. This is often the “barrier wall” for fishermen in Arowi Village when applying for assistance from relevant agencies, both at the regional and central levels. The government tends to channel assistance to fishermen who have met the prerequisite of vessel document legality in order to ensure the accountability of assistance distribution.

The importance of fishing vessel legality is not limited to access to assistance, but is also closely related to legal certainty and shipping safety. Based on Law Number 17 of 2008 concerning Shipping, every vessel sailing in Indonesian waters is required to have a Certificate of Vessel Nationality. For fishing vessels under GT 7, this document takes the form of a Small Pas (Pas Kecil). The Pas Kecil serves as proof of vessel ownership, a certificate of vessel nationality, and a document that facilitates fishermen in obtaining subsidized fuel and access to fisherman's insurance. However, the vessel measurement procedure, which is considered complicated, and the lack of information regarding certification procedures, make many fishermen in Arowi Village reluctant to legalize their vessels.

In response to this urgency, a concrete intervention step was needed to bridge this legality issue. Therefore, a Community Service activity was carried out in the form of Outreach on E-Pas Kecil Certification and the measurement of fishermen's vessels, organized through synergy between the Class IV Manokwari Harbor Master and Port Authority Office (KSOP) and the Manokwari School of Law (STIH). This activity, which targets the fishing community of Arowi Village as its main target, aims to provide education and a comprehensive understanding of the rights, obligations, and benefits of holding E-Pas Kecil certification. In this outreach, fishermen were given a comprehensive understanding that vessel measurement is not merely a burdensome administrative obligation, but rather an instrument of legal protection and the main “entry point” to obtain various rights and facilities from the state. Through the optimization of vessel administration and legality, it is hoped that fishermen will have legal certainty and a strong bargaining position to access various government assistance programs in the future, so that productivity disparities can be reduced and the welfare of coastal communities can be improved.

2. IMPLEMENTATION METHOD

The implementation method of this community service activity uses a participatory approach that integrates legal education with direct technical assistance in the field. The initial stage began with observation and problem identification in Arowi Village to map the main obstacles faced by fishermen, both in terms of navigation technology operation and administrative barriers to vessel document ownership. After the problems were identified, the Manokwari School of Law (STIH) established institutional coordination with the Class IV Manokwari Harbor Master and Port Authority Office (KSOP) to develop an appropriate intervention strategy. This synergy aims to ensure that the outreach material is not merely theoretical, but also provides applicable solutions for fishermen in meeting vessel registration and nationality regulatory standards in accordance with Minister of Transportation Regulation Number PM 39 of 2017.

The core of this program's implementation was carried out through a series of face-to-face outreach sessions and direct technical demonstrations of vessel measurement on the coast of Arowi Village. Fishermen were given a comprehensive understanding of the urgency of E-Pas Kecil certification as valid legal identity, which serves to protect their rights while also being an absolute prerequisite for accessing various government assistance schemes. In addition to strengthening the legal aspect, this activity also included re-education on optimizing the use of GPS devices to improve the efficiency of determining fishing grounds and ensure shipping safety for traditional fishermen. As a final stage, an evaluation of participants' level of understanding was carried out along with assistance in collecting administrative documents to ensure the continuity of the vessel certification process, which is expected to serve as a catalyst for the equitable improvement of the welfare of coastal communities in Arowi Village.

3. RESULTS AND DISCUSSION

3.1 Implementation of the Outreach and Enthusiasm of the Target Community

The implementation of the Community Service Program (PKM) in the form of outreach and measurement of fishermen's vessels in Arowi Village was carried out in a structured manner on Thursday, February 12, 2026, at 1:00 PM local time (WIT). The selection of the activity location took into account aspects of accessibility and the social context of the local community, namely the residence of Mr. Feri A. Raubaba, Coordinator of Fishermen at RT.004/RW.003, East Manokwari District, Manokwari Regency, West Papua Province. This location was considered highly strategic because it not only served as an informal gathering point for fishermen, but also bordered directly on the coastal area where fishermen's boats are moored. The decision to hold the activity within the residential surroundings of a prominent fisherman proved effective in easing the formal atmosphere, thereby fostering interactive dialogue among program implementers, partners, and the target community.

This activity involved cross-institutional synergy, in which the Manokwari Regency Harbor Master and Port Authority Office (KSOP) was present as a strategic partner, deploying three staff members, including vessel measurement specialists. The level of community participation was very high, as evidenced by the attendance of 42 heads of household (KK) working as active fishermen. In addition, the activity was also attended by the Village Head and local community leaders, indicating full support from the village institutional structure. In this forum, the Community Service Program (KKN) students, together with the Field Supervising Lecturer (DPL), did not merely act as event organizers, but took on a crucial role as facilitators bridging communication between KSOP's bureaucratic language and the practical understanding of the general public, so that the transfer of knowledge regarding legal awareness could proceed optimally.



Figure 1. Documentation of the outreach team and participants.

3.2 Realization of Vessel Measurement and Issuance of E-Pas Kecil

The approach of this activity did not stop at a theoretical level indoors, but continued with direct simulation and demonstration in the field. After an enthusiastic question-and-answer session, the KSOP team together with the group of fishermen moved to the shoreline to carry out the physical measurement of the vessels. The concrete output of this activity showed highly progressive results. Out of a total of 42 identified fishermen, the team successfully conducted a comprehensive data collection and physically measured 25 fishing vessel units. This process was immediately followed by the completion of administrative documentation as the main prerequisite for the issuance of the E-Pas Kecil or Fisherman's Card.

What deserves to be highlighted from this achievement is the time efficiency and service certainty. The documents for the 25 vessels that had been measured were immediately processed by KSOP, and the E-Pas Kecil documents were successfully handed over to the fishermen at the scheduled time, just before the withdrawal of the KKN students from the service location. The success in producing a tangible output in the form of legal documents proves that this empowerment program is problem-solving oriented, in which the education provided is directly converted into tangible benefits that support the community's fishing activities.



Figure 2. Measurement of Fishermen's Vessels for the Issuance of E-Pas Kecil

3.3 Implications of Legality for Fishermen's Welfare and Safety

The success of this vessel certification and measurement program has a crucial impact across four

main dimensions for the people of Arowi Village and the local government. First, from the dimension of legal awareness, this activity successfully transformed fishermen's paradigm regarding the importance of compliance with Law Number 17 of 2008 concerning Shipping and various derivative regulations of the Ministry of Transportation. Fishermen who previously took vessel documents lightly now realize their legal obligations, thereby avoiding potential sanctions when conducting fishing operations.

Second, from the dimension of economic welfare, ownership of the Measurement Letter and Pas Kecil (especially for vessels under 7 Gross Tonnage/GT) opens up access for fishermen to state facilities. These documents are an absolute prerequisite for fishermen to be legally recognized, making it easier for them to access subsidized fuel programs, banking credit schemes, fishermen's accident insurance, and even open up future export opportunities for marine products. Third, from the dimension of maritime governance, this vessel registration activity contributes directly to strengthening the national maritime database. Accurate and real data from Arowi Village will help the government formulate well-targeted marine policies and plan rational fishing zoning. Fourth, from the dimension of safety, the measurement process requires vessels to undergo technical shipping inspection standards, which directly reduces the risk of accidents at sea and ensures the sustainability of fishermen's businesses.

3.4 Institutional Synergy and Strengthening of Social Capital

Arowi Village has a comparative advantage in the form of abundant marine natural resource potential and a strategic geographical location close to the center of Manokwari City. In addition to promising coastal tourism, this area has strong social capital in the form of cultural diversity and solid traditional and religious institutions. However, this great potential has long been hampered by the lack of optimization of access to government assistance. Through this mentoring activity, the root of the problem began to be addressed. This outreach not only resulted in E-Pas Kecil documents, but also succeeded in reconstructing social relations and cross-sector communication. The creation of a more open communication pattern between the fishing community, village officials, and state institutions (KSOP) became the foundation for the sustainability of empowerment programs in the future. With the integration of maritime knowledge capacity and fisheries business legality, this service activity has laid a solid foundation for the people of Arowi Village. If this administrative governance continues to be supported and developed through active community participation, the economic welfare of coastal communities, in tandem with the preservation of the marine ecosystem, can be realized sustainably.

4. CONCLUSION

Based on the entire series of Community Service Program (PKM) activities that have been carried out, it can be concluded that the effort to optimize administrative completeness through outreach and vessel measurement practices is a strategic step in improving the standard of living of coastal communities in Arowi Village. The main problems, which initially consisted of low navigation technology literacy and administrative barriers hindering access to government assistance, are now beginning to be resolved through the synergy between academics from STIH Manokwari and the technical authority of KSOP Class IV Manokwari. The transformation of fishermen's legal awareness serves as the main foundation for the creation of a more orderly, safe, and economically competitive fisheries ecosystem.

The implementation of participatory and interactive activities has proven capable of producing tangible outputs that are directly felt by the community. Of the total 42 fishermen in Arowi Village, 25 vessels were successfully measured and formally registered for the issuance of E-Pas Kecil documents. Ownership of these documents not only provides legal certainty and shipping safety guarantees for traditional fishermen, but also opens up broader access to various subsidy programs, insurance, and

infrastructure assistance from the government. Thus, this activity not only provides a short-term solution for the legality of fishermen's assets, but also builds a sustainable cross-sector partnership for the realization of more equitable welfare for coastal communities in Manokwari Regency.

5. RECOMMENDATIONS

Based on the results of the activity implementation and field evaluation, several strategic recommendations can be put forward for the sustainability of the program:

Local Government and Related Agencies (KSOP): It is hoped that a periodic outreach program (“jemput bola”) will be implemented to facilitate fishermen who have not yet had the opportunity to have their vessels measured, as well as to facilitate digital updating of E-Pas Kecil data.

The Fishing Community of Arowi Village: Fishermen are advised to promptly form a legally incorporated Joint Business Group (KUB), so that the vessel legality documents already obtained can be used collectively to apply for infrastructure assistance and business capital.

Optimization of Digital Literacy: Given that the registration system is now beginning to shift to electronic platforms, further training on the use of maritime service applications is needed so that fishermen no longer depend on third parties for administrative processing.

Village Institutions: Arowi Village officials need to integrate fishermen's vessel legality data into the village database system to facilitate the synchronization of social assistance programs and coastal economic empowerment programs from the central government.

Academic Sustainability: STIH Manokwari is advised to continue providing ongoing legal assistance, not only limited to vessel legality, but also to the protection of the rights of coastal indigenous law communities in the East Manokwari region.

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