



Strategic Development of Community Oral Traditions in the Management and Utilization of Fisheries Resources in the Maluku Islands

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ABSTRACT

Community oral traditions in the management and utilization of fisheries resources in Maluku are diverse, yet much remains unexplored. This research aimed to examine the role of these oral traditions in managing and utilizing fisheries resources and to recommend strategies for preserving community culture. The research was conducted from July 2020 to February 2024 using a descriptive qualitative approach, along with a literature review. Primary data were collected through research instruments, including documentation and daily notes, while secondary data were gathered from relevant online media sources. The research revealed that community oral traditions in fisheries resource management are reflected in the sasi rules, which include various prohibitions on resource extraction that could harm the environment or lead to resource depletion. Oral traditions related to the use of fisheries resources include practices such as timba Laor, timba Puri, timba Sontong, and others. Traditional fishing tools are also part of these oral traditions, including mangail boats, traps, sero, and more. These traditions are expressed through songs, dances, and folk tales, although the number of such traditions is relatively small. To preserve and develop the oral traditions of the Maluku community, the following strategies are recommended: (1) incorporating oral traditions into the school curriculum in Maluku, (2) documenting oral traditions in audio, video, and text formats, (3) organizing festivals and cultural arts performances through community and studio initiatives to introduce these traditions, and (4) utilizing technology to disseminate information about oral traditions to the wider community.

INTRODUCTION

Maluku is one of the provinces in Eastern Indonesia which has archipelagic characteristics (Nurhaeny *et al.*, 2019). This province has a unique geography and is fragmented with many islands, predominantly small islands (Abdulah *et al.*, 2024).

Development planning in the Maluku Islands is carried out using an island group approach as a development unit (Tumiran *et al.*, 2019). Island groups have similar social, cultural, economic, and ecosystem aspects. This showcases the natural richness and cultural diversity of the people of this island group.

Community activities on small islands that are continuously carried out for certain purposes form a cultural tradition. Island group communities have cultural traditions that are passed from one generation to the next through stories, customs, and cultural practices called oral traditions. Maluku has a rich oral tradition in managing and utilizing marine resources including fisheries. This study focused on Sasi Laut and community-based fish resource utilization traditions. Sasi is a prohibition on the extraction of economically valuable natural resources on land or in the sea for a certain period of time. In each island group, the Sasi tradition persists but has experienced a decline due government policies related to changes in the village government system. The tradition of utilizing marine resources such as *timba Laor*, *timba Puri*, *timba Sontong*, and others continue today. These tradition contribute to food security in the Maluku Island group.

Oral traditions in the management and utilization of fisheries resources have the potential for further development. They not only provide practical information about marine ecosystems but also shape values, ethics, and cultural identity, supporting the sustainability and conservation of fisheries resources. Integrating oral traditions into fisheries management is important for maintaining the environmental sustainability and the well-being of the Maluku people. This research aimed to examine the existence of oral traditions and recommend strategies for their development in the management and utilization of fisheries resources in the Maluku Islands. This research is expected to contribute significantly to the Maluku regional government's efforts to preserve the environment and promote sustainable development in the tourism, fisheries, and economic sectors in Maluku.

MATERIALS AND METHODS

Methods

This study used a descriptive qualitative method to uncover patterns, themes, and relationships from the data, which were then interpreted to provide a deeper understanding of the social and cultural context being researched (Miles *et al.*, 2018). The research was conducted from July 2020 to February 2024. There are two types of data collected, namely primary and secondary data. The primary data collection method involved interviews with key informants, either directly in the field or by telephone. Additionally, observations and daily field notes were made. The secondary data collection method included a literature study of previous research and document analysis.

Data analysis

The research data were analyzed using the qualitative descriptive method, which involves the following analysis stages: (1) Data reduction: This process involves selecting, focusing, simplifying, abstracting, and transforming raw data into a more organized and meaningful form; (2) Data presentation: The form of presentation is in the form of narrative text and tables, which make it easier to draw conclusions; and (3) Drawing conclusions and verification: Temporary conclusions are drawn based on the data and are followed by verification of the of conclusions.

RESULTS AND DISCUSSION

1. The Existence of oral traditions in fisheries resource management

The oral tradition in managing fisheries resources in the Maluku Islands in this research is called *sasi*, and key findings are presented in Table (1). The results of the inventory of oral traditions in the implementation of *sasi* are traditional *sasi* ritual ceremony for closing and opening the *sasi*; religious ritual events; traditional clothing worn by traditional leaders and the community; traditional equipment used; explanation of aims and objectives in traditional language by the Kewang and the Raja, as organizers of the *sasi* event; traditional language songs sung; traditional dances performed; traditional musical instruments used; local food made by the community for *sasi* events; determination of closure boundaries for *sasi* areas and *sasi* signs; local community knowledge of natural cycles and ecosystem dynamics as the basis for implementing *sasi*; the duties of responsibility for safeguarding and supervising *sasi* are assigned to the Kewang; *sasi* regulations are the result of customary deliberation; prohibitions during *sasi* implementation; and sanctions and fines for violating *sasi*.

Table 1. Important aspects of *sasi*

No	Important aspects	Description
1	Objectives of Sasi	Sasi is a traditional practice aimed to protect natural resources with economic value for a certain period and to protect the environment from over-exploitation
2	Implementation Mechanism	Closing off the area with mutually agreed boundaries
3	Responsible Implementer	The king acts as the traditional head, and the kewang acts as the traditional security guard
4	Sasi Type	Regional sasi and commodity sasi
5	Traditional Rituals	The traditional event of closing and opening the sasi
6	Sasi Duration	The regional sasi is closed annually, while the commodity sasi is closed monthly according to the harvest time of the commodity
7	Types of marine resources	Sea Cucumber, Lobster, Lola, Coral, Mangrove
8	Types of land resources	Rattan Trees, Bamboo Trees, Damar Trees, Rubber Trees, Coconut Trees, cloves, nutmeg, and sago

No	Important aspects	Description
9	Types of river resources	Lompa Fish (<i>Trissina baelama</i>)
10	Sign of Sasi	Tree poles decorated with woven coconut leaves, red flags, or traditional colors
11	Sasi symbol	The commodities under sasi are displayed in the sasi area
12	Ecological Benefits	Provides time for natural resources to recover and reproduce, increasing sustainability
13	Social Benefits	Strengthens social cohesion, local wisdom, and community cultural identity
14	Economic Benefits	Protected natural resources maintain higher economic value because their sustainability is maintained
15	Gender Roles	Both men and women participate in the implementation of sasi

The results of this research indicate the necessity of developing a comprehensive document for the oral tradition of sasi. Without documentation, various negative impacts may arise. These negative impacts include:

Loss of local knowledge

Without documentation, the knowledge contained in the sasi oral tradition is at risk of being lost due to the death of traditional elders or social changes. This knowledge includes rules, practices, and rituals that are important for sustainable management of natural resources (Das *et al.*, 2022).

Reducing the effectiveness of resource management

Without documentation, sasi rules and practices are difficult to disseminate and be understood by the younger generation, which can reduce the effectiveness of fisheries resource management. This can result in over-exploitation and environmental degradation (Goswami, 2024).

Loss of cultural values and community identity

The sasi tradition not only functions as a resource management tool, but also as an integral part of the cultural identity of the Maluku people. Without documentation, the cultural values contained in this tradition are at risk of being marginalized or lost (Pearson *et al.*, 2021).

Difficulties in enforcement of customary law

Documentation plays an important role in ensuring that sasi rules and regulations can be consistently enforced. Without clear documentation, enforcement of customary laws can become difficult, which in turn can lead to non-compliance and conflict (Aasoglenang *et al.*, 2023).

Challenges in integration with modern policies

Sasi documentation is important for integration with broader natural resource management policies. Without documentation, it is difficult for the government and related institutions to recognize and integrate this tradition into a modern policy framework (Malodia *et al.*, 2021). With good documentation, the sasi tradition can continue to provide ecological, economic, and social benefits for the people of the Maluku Islands now and in the future.

The latest developments include the opening of sea sasi in Negeri Rutong, South Leitimur District, Ambon City, Ambon Island in February 2024. This shows the continuity of the oral tradition of sea sasi despite challenges from modernization. Many communities in Maluku have successfully adapted the practice of sasi in ways that are relevant to the contemporary context. Some initiatives involve the digitization and documentation of sasi rules to ensure wider understanding and preservation. There are collaborative efforts between local communities, government, and NGOs to support and strengthen sasi practices.

2. The existence of oral traditions in the utilization of fisheries resources

The oral tradition of utilizing fisheries resources has been developed into festivals. There are three main traditions and festivals on Ambon Island: *timba Laor*, *timba Puri*, and *timba Sontong*. The research results are shown in Table (2). The important aspects of oral tradition in the use of fisheries resources on Ambon Island are shown in Table (3).

Table 2. Forms of social capital, interacting actors, and implementation of operational social capital in the seaweed cultivation enterprise

No.	Tradition name	Description	Time (Mount)	Equipment	Location
1	<i>Timba Laor</i>	Harvest marine worms (<i>Polychaeta</i>)	March/April	Lighting Tools Scoop net Basin container	Latuhalat Village
2	<i>Timba Puri</i>	Harvest anchovies	June and September	Traditional boat Lighting tools Scoop net	Nusaniwe Village
3	<i>Timba Sontong</i>	Harvest squid (<i>Loligo</i> sp)	October- December	Traditional boat Lighting tools Scoop net	Hukurila Village

Table 3. Important aspects of oral tradition in the use of fisheries resources on Ambon Island

No	Important aspects	Description
1	Local knowledge	Natural signs and environmental conditions important for navigation determine harvest time Capture techniques Processing and preservation methods
2	Local wisdom	Maintain and utilize the harmonious relationship between humans and nature for the sustainability of marine resources
3	Social interaction	Strengthening social ties in society through joint activities
4	Cultural identity	Preserving culture and maintaining the continuity of community identity and pride
5	Education of the younger generation	Continuing traditions so that the younger generation understands and appreciates the cultural heritage of the local community
6	Food security	Maintain food stocks for the community
7	Community safety	Strengthening solidarity and mutual cooperation to increase security stability
8	Gender equality	Participation of men and women in carrying out traditions and supporting each other

The tradition of utilizing fisheries resources (Table 3) has been developed in the form of festivals, this has become a cultural asset that is preserved. Overall, traditions and festivals support and strengthen each other. Oral traditions provide the knowledge base and cultural values, while festivals provide a platform for implementing, celebrating and promoting that cultural heritage. These two elements together help keep traditions alive and relevant through changing times.

The results of the inventory of oral traditions in the implementation of traditions and festivals are as follows: traditional ritual ceremonies related to traditional clothing, traditional language in festival processions, traditional songs and music performed at festivals, and rules for implementing each tradition for the community. The results of a study on oral traditions in making community-based fishing equipment on Ambon Island are shown in Table (4).

Table (4) illustrates that oral traditions in community-based fishing gearmaking influence and enrich the use of fishing gear. This shows that it is more than just a traditional fishing tool but an integral part of the culture and life of the people of the Maluku islands.

Table 4. Fishing equipment and oral traditions of the community on Ambon Island

No.	Fishing equipment	Description	Oral traditions: Community local knowledge
1	Perahu	Sea transportation facilities and fishing units	- selection of quality natural materials, such as: wood as the main material for the boat and sero as well as rattan and bamboo for the Bubu.
2	Bubu	Fishing trap	- Tree sap as an adhesive or coating material
3	Sero	Fish aggregating device	- Plant extracts for natural paint - designing fishing equipment and making its construction - making fishing gear using traditional technology - division of tasks and work in work groups - using fishing gear according to the purpose - Strategy in placing bubu and sero in certain locations based on fish flows and seasons

3. Strategy for the development of oral traditions

The oral tradition of preserving sasi in the future needs to be carefully considered and supported by the development strategy outlined in Table (5). It is hoped that this strategy will attract the attention of the Maluku regional government and other stakeholders, ensuring that the sasi tradition continues to thrive and evolve within Ambonese society, becoming an integral part of Maluku's cultural identity. The development of oral traditions related to the use of fisheries resources in the timba Laor, timba Puri, and timba Sontong traditions on Ambon Island is presented in Table (6). This table outlines various development strategies that can be implemented to preserve the timba Laor, timba Puri, and timba Sontong traditions within the Ambon community.

Table 5. The oral tradition of preserving Sasi in the future needs to be considered and followed by the development strategy

No	Development strategy	Description
1	Documentation and archives	Documenting oral traditions through audio and video recordings, as well as written transcriptions
2	Education and Training	Integrating oral traditions in formal and non-formal education curricula
3	Cultural Festivals and Exhibitions	Organizing festivals and exhibitions that showcase the oral tradition of sasi for the wider community
4	Collaboration with the Media	Using mass media and social media to promote and disseminate the sasi tradition
5	Local Community Participation	Involving local communities in every stage of management and preservation of the sasi oral tradition
6	Development of Cultural Tourism	Integrating sasi traditions in cultural tourism packages to attract tourists
7	Research and Development	Conduct research to document and develop methods for preserving the sasi tradition
8	Traditional Leadership Training	Train local leaders to be the main movers in preserving and managing the sasi tradition
9	Use of Information Technology	Utilizing information technology to digitize and to disseminate the oral tradition of sasi
10	Collaboration with Academic Institutions	Collaborating with universities and research institutions to support the preservation of the sasi tradition

Table 6. Strategy for developing oral traditions in utilization fisheries resources on Ambon Island

No.	Development strategy	Description
1	Education and Public Awareness	Carrying out formal and informal education programs, as well as public awareness campaigns about the importance of cultural preservation, including <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i>
2	Documentation and Research	Thoroughly documenting the traditions of <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i> , including the origins, meanings, and values contained therein, as well as conducting related research
3	Digital Media Development	Create a digital media platform such as a website or mobile application that provides information about <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i> , including videos, audio, and articles
4	Organizing Cultural Events	Holding festivals, exhibitions, and art performances featuring <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i> to arouse public interest and to strengthen cultural identity
5	Training and Skills Improvement	Provide training for youth in skills related to <i>timba Laor</i> , <i>timba Puri</i> and <i>timba Sontong</i> such as singing, dancing, or making traditional musical instruments
6	Policy Advocacy	Advocate for public policies that support the preservation of local culture, including financial support for the preservation of <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i>
7	Community Participation	Involving the community in planning, implementing and evaluating programs for preserving and developing the <i>timba Laor</i> , <i>timba Puri</i> , and <i>timba Sontong</i> traditions

Table (7) shows strategies for developing oral traditions to preserve local knowledge of making fishing equipment such as boat (*perahu*), *bubu*, and *sero*. Additionally, Table (7) provides a clear picture of strategies that can be implemented to preserve local community knowledge about making fishing equipment in Ambon. Local knowledge passed down orally from generation to generation is a valuable source of information about sustainable techniques in fisheries management. Research shows that local knowledge plays a key role in maintaining the balance of ecosystems and natural resources. These oral traditions, if properly documented and developed, can serve as a guide for sustainable practices. The strategy of developing oral traditions helps empower local communities. Through community-based education and training, people can gain new skills and can strengthen their cultural identity. Education and training programs that focus on local traditions have been shown to increase community participation in natural resource conservation (**Berkes et al., 2000**). Local wisdom integrated in oral traditions often contains principles of sustainable resource management. For example, techniques for making waste and traps that are environmentally friendly and do not damage marine habitats have been used for centuries. A study by **Boafo et al. (2016)** showed that these traditional practices are often more effective in conservation compared to modern methods that do not take local ecological aspects into account. In addition, oral traditions contain knowledge about how to adapt to environmental and climate changes. People who live close to nature, such as those in the Maluku Islands, have a deep understanding of seasonal changes and climate phenomena that can affect fisheries resources. Research of **Nakashima et al. (2012)** emphasized that local knowledge can help communities adapt to climate change through flexible and responsive resource management.

Documentation and digitization of local knowledge documentation in the form of writing, video and audio recordings are very important to preserve oral traditions. Digitization projects that involve community participation can ensure that this knowledge is available to future generations. Initiatives like this have been carried out in various regions with positive results (**Smith, 2012**). Educational programs that integrate local knowledge into school curricula and community training can strengthen intergenerational knowledge transfer. This can also increase awareness about the importance of sustainable management of fisheries resources (**Jones, 2014**).

Collaboration between local communities, government, educational, and cultural institutions can strengthen efforts to preserve oral traditions. Educational institutions can provide resources and expertise, while cultural institutions can assist in the promotion and dissemination of information (**Thaman et al., 2013**). Advocacy for public policies that support the preservation of local culture and knowledge is essential. Policies that provide incentives for the preservation of traditional knowledge and sustainable practices can encourage communities to maintain and develop their traditions (**Folke et al., 2002**). The strategy of developing oral traditions has an important meaning in preserving the culture of managing and utilizing fisheries resources in the Maluku Islands. By integrating local

knowledge into modern management practices, documenting oral traditions, and educating communities, cultural, and ecological sustainability can be achieved. Collaboration between various parties and adequate policy support are also the keys to success in this conservation. These strategies can help in efforts to preserve oral traditions and sustainably manage fisheries resources in the Maluku Islands

Table 7. Strategy for developing oral traditions for making fishing equipment in Ambon

No	Development strategy	Description
1	Education programs	Integrate traditional knowledge about making mangael, <i>sero</i> , and trap boats into formal and informal education curricula in local schools
2	Cultural Workshop	Hold cultural workshops involving local experts in making <i>perahu</i> , <i>bubu</i> , and <i>sero</i> to transfer knowledge directly to the younger generation
3	Documentation and Research	Create visual and written documentation about traditional techniques for making <i>perahu</i> , <i>bubu</i> , and <i>sero</i> including processes, materials, and related cultural values
4	Digital Media Development	Create a digital platform such as a website or application that provides video tutorials, articles and information about making <i>perahu</i> , <i>bubu</i> and <i>sero</i>
5	Cultural Festival	Hold a special cultural festival featuring demonstrations of making <i>perahu</i> , <i>bubu</i> , and <i>sero</i> as well as discussions about the importance of preserving these traditions
6	Young Generation Training	Carrying out skills training for the younger generation in making <i>perahu</i> , <i>bubu</i> , and <i>sero</i> by traditional experts as an effort to transfer knowledge
7	Traditional Collection Exhibition	Organizing exhibitions featuring traditional <i>perahu</i> , <i>bubu</i> , and <i>sero</i> as a means of introducing and appreciating local cultural heritage
8	Partnership with the Community	Collaborate with local organizations, fishermen and boat owners to promote conservation activities and learning related to fishing gear making

4. Policy recommendation

Based on the results, seven policy recommendations can be implemented: (1) inventory and documentation of oral traditions, (2) integration of local wisdom into fisheries policy, (3) education and extension programs, (4) community-based management, (5) strengthening local capacity and institutions, (6) funding and incentives, and (7) monitoring and evaluation. A detailed description of these policy recommendations are found in Table (8).

Table 8. Policy recommendations

No	Policy recommendations	Implementation
1	Inventory and Documentation of Oral Traditions	<ul style="list-style-type: none"> *Carrying out inventory and documentation of oral traditions related to the management and utilization of fisheries resources in Maluku *Collaborating with academic institutions and local communities to document stories, myths, customary rules, and traditional fisheries management practices
2	Integration of Local Wisdom in Fisheries Policy	<ul style="list-style-type: none"> * Integrating traditional knowledge in fisheries management regulations and policies *Initiate the role of traditional leaders and community leaders in the decision-making process related to fisheries management
3	Education and Extension	<ul style="list-style-type: none"> *Develop education and outreach programs that educate the community about the importance of local wisdom in managing fisheries resources *Including material about oral traditions and local wisdom in the formal and informal education curriculum in Maluku
4	Community Based Management	<ul style="list-style-type: none"> *Encourage the implementation of community-based management models that utilize local wisdom *Support the formation of fisheries resource management groups based on traditions and customary rules
5	Strengthening Local Capacity and Institutions	<ul style="list-style-type: none"> *Provide training and support for traditional institutions and local communities to strengthen capacity in managing fisheries resources *Establishing a communication forum between the government, Indigenous communities, and other stakeholders to ensure effective coordination in fisheries management
6	Funding and Incentives	<ul style="list-style-type: none"> * Providing funding for local initiatives that prioritize fisheries resource management based on oral traditions *Providing incentives for communities that successfully implement sustainable fisheries management practices based on local wisdom
7	Monitoring and Evaluation	<ul style="list-style-type: none"> *Develop monitoring and evaluation mechanisms involving local communities to ensure the effectiveness of policies and the sustainability of fisheries management practices * Conduct regular evaluations to assess the impact of policies on the sustainability of fisheries resources and community welfare

CONCLUSION

The existence of community oral traditions regarding the management and utilization of fisheries resources in the Maluku Islands is important and must be considered, preserved, and developed in the future. This significance is traced back to

these tradition offering ecological, social, cultural, and economic benefits to the people of the Maluku Islands. The strategy for developing oral traditions in the management and utilization of fisheries resources includes integrating education and training programs, implementing fisheries policies, fostering stakeholder collaboration, and optimizing digital technology for documentation.

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