



Exploring Indigenous Knowledge System in South Papua: Indigenous Education and System Thinking of Marori Tribe

Hastangka Hastangka,¹ Sabar Budi Raharjo², Opik Abdurrahman Taufik,³ Seli Marlina⁴, Ranta Butar-Butar⁵, Suhendi Syam⁶, Anang Sudigdo⁷

^{1,2,3} Research Center for Education, National Research and Innovation Agency

^{4,5} University of Musamus, Merauke, Papua

⁶ University of Muhammadiyah Buton

⁷University of Sarjanawiyata Tamansiswa, Yogyakarta
hastangka@brin.go.id

Abstract. Marori is one of the tribes in the South Papua region. Based on initial findings, the Marori language is now endangered as there are only 29 native speakers left. There are still a lot of issues in the study of indigenous people from the perspective of the indigenous knowledge system regarding education and environment. This research uses a qualitative approach. Primary data was obtained through observation, focus group discussion, and in depth interviews in the Marori tribe living in Wasur Village, Merauke, South Papua while secondary data was obtained through literature study. Data analysis in this research uses interpretation dan semiotics interpretation. This research will attempt to answer the question what is the position of the indigenous knowledge system in Papua?, secondly, how this knowledge system can be used to strengthen indigenous education and thirdly, what kind of system thinking of Marori tribes in responding critical issues around them. The aims of this research is to learn the concepts and systems of indigenous knowledge in Papua, specifically the Marori tribe, and to find out how the indigenous knowledge system can contribute to strengthening indigenous education. The result of this study shows that the indigenous knowledge system in Papua is autonomous in thinking. It is based on the way of life and cultural environment in Papua. In addition, system thinking of Marori is formed from the environmental and cultural condition they have.

Keywords: Indigenous education, Knowledge system, Marori, Papua.

1 Introduction

A lot of discourses about indigenous knowledge in various studies revolve around its roles and functions in maintaining and preserving cultural heritage, world recognition of the existence of indigenous knowledge [1], education [2], [3] and sustainable environmental governance [4], [5], [6]. Different discourses regarding the conception of indigenous knowledge, indigenous knowledge system (IKS), and indigenous culture

© The Author(s) 2024

A. Hidayat et al. (eds.), *Proceedings of the International Conference on Multidisciplinary Studies (ICoMSi 2023)*, Advances in Social Science, Education and Humanities Research 829,

https://doi.org/10.2991/978-2-38476-228-6_58

are being mentioned in discussions about the nature of indigenous knowledge as a way of thinking, system of thinking, and philosophy of culture from certain regions. UNESCO defines indigenous knowledge as an effort to understand the knowledge, skills, and philosophies in society as well as the history of human life in relation to its environment". [7] Differences in cultural identity, the impact of colonialism, politics, and power structures in society have brought diverse epistemological understandings of indigenous knowledge. [8] The White House defined:

“Indigenous Knowledge – also referred to as Traditional Knowledge or Traditional Ecological Knowledge – is a body of observations, oral and written knowledge, innovations, practices, and beliefs that promote sustainability and the responsible stewardship of cultural and natural resources through relationships between humans and their landscapes.” [9]

The perspective that should be used in understanding the meaning of indigenous knowledge systems in many cultural and geographical contexts is to reach the same understanding in appreciating the inclusivity of indigenous knowledge and its contribution to the local people and the well-being of mankind. [10] UNESCO develops a program on Local and Indigenous Knowledge Systems (LINKS) which promotes local and indigenous knowledge within the scope of environmental understanding and policy-making processes. UNESCO still needs to do a lot of work in providing knowledge and information to understand Indigenous peoples, traditional knowledge, and local knowledge systems related to biodiversity and ecosystems. [11]

Based on the literature study, there are only a few discussions and explanations about the indigenous knowledge system in Papua. Most of the studies conducted regionally in Southeast Asia were carried out in Papua New Guinea. A specific study conducted by Arsyad and Wahid (2022) describes the construction of national insight in the Maybrat tribe, West Papua using the indigenous education approach. This research shows that the construction of national insight in the Maybrat tribe is in line with the traditional values. The indigenous education system (Woun-Wofle) shows insight into multiculturalism and a spirit of tolerance in the Papuan people. [12] In a media release of Pusaka (2022), it is explained that "the existence and rights of indigenous peoples in the Land of Papua have not been fully recognized, respected, and protected by the state". [13]

This study aims to learn about the existing Indigenous Knowledge System in Papua. This research will answer the question of whether the indigenous knowledge system in Papua has an influence on the Marori thinking system in education and how the indigenous knowledge system in Papua is formulated and implemented.

2 Method

The subject of the research is the Marori tribe living in Wasur village, Merauke, South Papua. This research uses a qualitative approach. Primary data was obtained through observation in-depth interviews with community leaders, and focus group discussions with the community in the Marori tribe living in Wasur Village, Merauke, South Papua while secondary data was obtained through literature study. Data analy-

sis in this research uses interpretation dan semiotics interpretation of the system of signs, symbols, and verbal explanations to find meaning and concepts related to the indigenous knowledge system of the Marori tribe. This research was conducted research in 2023.

3 Finding and Discussion

3.1 Getting to Know Marori Tribe, Merauke, South Papua

The livelihoods of the Marori Menggey tribe in Wasur village, Merauke district, southern Papua province, are hunting, gardening, fishing, and sago palm harvesting. These activities have been carried out for generations using very simple methods and equipment. For example, for hunting they usually use traditional arrows and sharp weapons (long machetes). This tool measures approximately 20 centimeters to 30 centimeters and the handle is made of wood. The tribe always carries these two hunting tools when they go hunting the forest wildlife such as wild boar, deer, sahang (kangaroo), and cassowary. The hunted animals are then brought to the home of the family. Some are sold to traditional markets such as Wamanggu market and Baru market in Merauke district. Sometimes the Marori Menggey tribe also sells hunted animal meat at road intersections or by making a kind of para-para (showcase) where they display hunted products for sale and purchase. They usually hunt for days in the forests of Merauke district up to the border between Indonesia and Papua New Guinea.

The next livelihood is gardening. They use traditional gardening methods and are nomadic as they do not have sufficient knowledge about sustainable land cultivation. When a garden can no longer produce crops, they will move to another land. Their gardening methods are also weather-dependent. When the rainy season comes, they will move to another land and plant commodities that suit the current season.

Apart from the two activities mentioned above, another activity that has been carried out for generations in this tribe is traditional fishing using very simple equipment such as fishing rods (hooks), nets, and arrows. Not only the elders, but the teenagers in the tribe are also very skilled at hunting fish using arrows and bows. The fish caught are then consumed by the family. This tradition has been inherited from their ancestors due to several factors as follows: (1) geographical location. The coastal area of the village has allowed them to learn fishing (2) the fish are very abundant in the area.

The last traditional livelihood is pangkur sago. The tribe cut down sago trees that can produce sago from which the starch can then be extracted and used as a staple food. This activity has also been carried on for generations in the Marori Menggey tribe. Sago is one of the basic local food ingredients in Wasur village, Merauke district, southern Papua province.

3.2 Current Situation of Indigenous Education

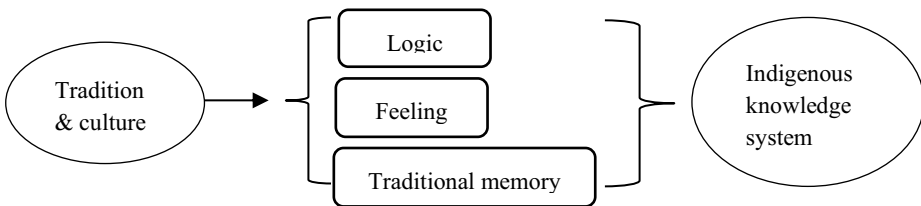
The issue of indigenous education in Papua initially focuses on access to education for indigenous people in Papua. It then gets broader and also discusses inclusive education and education equality between citizens in general and indigenous people. The idea of inclusive education brings themes related to one-roof education (integrated schools) in several schools in Merauke, Boven Digoel, and Wasur. The results of studies conducted show that integrated schools have provided space for indigenous people to gain access to education through a specific curriculum [14].

Indigenous education in Indonesia in the eastern region of Indonesia uses an inclusive education paradigm that emphasizes access to education for indigenous communities or native people. The cultural approach is still the fundamental choice related to knowledge management in education. There are 3 aspects of concern in the knowledge management: 1) Cultural aspects. Indigenous education prioritizes issues regarding culture as an approach to education advancement. Culture becomes the main aspect build indigenous education. Insight into local cultural knowledge is considered to be an important representation in understanding the community's knowledge system to advance education [15], 2) Regulatory aspects. Government regulations and regional regulations are the agenda-setting in carrying out education for marginalized or remote communities. 3) Environmental system. Environmental systems contribute to strengthening indigenous education in Indonesia.

The current situation and condition affect indigenous educational paradigms and models which are not yet standardized. The discussion about indigenous education and knowledge systems is to build symbolic knowledge that can be for generations in the indigenous communities.

3.3 Mapping on Indigenous Knowledge System in Papua

The indigenous knowledge system in Papua is a knowledge system that is autonomous and territorial because the knowledge system in the Papua region is almost the same as the knowledge system in the Eastern part of Indonesia such as West Nusa Tenggara (NTB), East Nusa Tenggara (NTT), Maluku, North Maluku and Papua. Papua is not the only region that has a unique knowledge system. The rationality and logic formed in producing knowledge are obtained through people's way of life. The indigenous knowledge system in Papua values the soul, thoughts, and feelings as can be seen in the following map.



Source: researcher analysis, 2023.

Fig. 1. Map of Indigenous Knowledge system in Marori Papua

The graphic above shows the philosophical roots of the indigenous knowledge system in Marori Papua. The community combines the logic of life, feelings, and traditional memory to build and shape knowledge collectively in an integrated and systemized way. Indigenous people in Papua build a thinking ecosystem that is united and integrated, and the culture that shapes people's habits takes a long process to turn into knowledge. The philosophy of indigenous education and the system of thinking that developed as part of the logic are useful in encouraging people to be kind and gentle in managing the resources they have around the place they live. Indigenous education will help people to learn new logic and subject matter that can develop a more contextual way of thinking in line with the current situation in the era. The indigenous knowledge system of the Marori tribe leads to the strengthening of feelings. Strong feelings will be the best place for intelligence to read natural signs, because the life of the Marori tribe is very close to nature.

4 Conclusion

The indigenous knowledge system in Papua that is currently developing. The indigenous knowledge system in Marori is built by three aspects, namely logic, feeling, and traditional memory. Logic works as a process for thinking and capturing the reality and doing what is understood from the reality. However, feeling and traditional memory are stronger in building systems thinking and effort to support indigenous education. These things cannot be separated. Different cultural and social systems about the position and role of indigenous people and the function of knowledge interpreted in different occasions will have an impact on the perspective of education in building a new social order. Better knowledge governance will help reduce misunderstandings and misinterpretations. The studies that have been carried out on indigenous knowledge systems in Papua are focusing on the existence of developed indigenous education which will have a lot of influence on the role of actors and mobilizers of society in understanding the meaning and values that will be passed on to the next generation.

References

1. Thaman, K. H.: Acknowledging indigenous knowledge systems in higher education in the Pacific Island Region. In *Higher Education, Research, and Knowledge in the Asia Pacific Region* (pp. 175-184). New York: Palgrave Macmillan US (2006).
2. Breidlid, A.: Culture, indigenous knowledge systems and sustainable development: A critical view of education in an African context. *International journal of educational development*, 29(2), 140-148 (2009).
3. Wahyudin, D., Sumule, A., & Suwirta, A.: Alternatives of Genuine Basic Education Program in Papua Provinces, Indonesia. *TAWARIKH*, 12(2). 219-240 (2021).
4. Thompson, K. L., Lantz, T. C., & Ban, N. C.: A review of Indigenous knowledge and participation in environmental monitoring. *Ecology & Society*, 25(2).1-28 (2020).
5. Ellis, S. C.: Meaningful consideration? A review of traditional knowledge in environmental decision making. *Arctic*, 66-77 (2005).

6. Varghese, J., & Crawford, S. S.: A cultural framework for Indigenous, Local, and Science knowledge systems in ecology and natural resource management. *Ecological Monographs*, 91(1), e01431 (2021).
7. UNESCO: Local and Indigenous Knowledge Systems (LINKS). UNESCO, Paris (2021).
8. Du Plessis, H., & Raza, G.: Indigenous culture as a knowledge system. *Tydskrif vir letterkunde*, 41(2), 85-98 (2004).
9. Daniel R. A.: What is "Indigenous Knowledge" And Why Does It Matter? Integrating Ancestral Wisdom and Approaches into Federal Decision-Making," The White House (2022). [Online]. Available: <https://www.whitehouse.gov/ostp/news-updates/2022/12/02/what-is-indigenous-knowledge-and-why-does-it-matter-integrating-ancestral-wisdom-and-approaches-into-federal-decision-making/>. [Accessed 19 August 2023].
10. Murove, M. F.: Indigenous knowledge systems discourse and inclusionality: An Afrocentric quest for recognition in a globalised world. *Journal for the Study of Religion*, 31(1), 159-176 (2018).
11. UNESCO: Local, indigenous and scientific knowledge. UNESCO (December 2022). [Online]. Available: <https://www.unesco.org/en/biodiversity/knowledge>. [Accessed 19 August 2023].
12. Arsyad, Y., & Wahid, B.: Construction Of Indigenous Education On National Insights Of The Maybrat Tribe Based Ethno Pedagogy. In International Seminar on Language, Education, and Culture (ISoLEC) (Vol. 6, No. 1, pp. 221-227) (2022).
13. Pusaka.: The Role of Indigenous Women in the Land of Papua in Striving for Sustainable Life and Environment. Pusaka (2022). [Online]. Available: <https://pusaka.or.id/en/the-role-of-indigenous-women-in-the-land-of-papua-in-striving-for-sustainable-life-and-environment/>. [Accessed 19 August 2023]
14. Marpaung, R. W., Sinaga, S. B., & Womsiwor, S.: Inclusive Education Curriculum Development for Indigenous Students in Papua. In SHS Web of Conferences (Vol. 149). EDP Sciences (2022).
15. Fiharsono, A., Carey, M., Hyde, M., Beazley, H., & Yektiningtyas-Modouw, W.: Culturally based learning needs of Korowai students in a lowland-remote area of Indonesian Papua: school physical environment and building design. *The Australian Educational Researcher*, 1-19 (2023).

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

