

ABSTRACT

Mustakim, A. 2024. Exploration of Natural Science Concepts in the Traditions and Local Knowledge of the Duano Tribe of Jambi. Thesis. Jambi University Postgraduate Program Supervisor I. Ir. Bambang Hariyadi, M.Si., Ph.D. II. Dr. Afreni Hamidah, S.Pt., M.Si.

Jambi is not only rich in natural resources, but also has a high level of cultural diversity. Starting from Ujung Jabung to Telun Berasap, various groups of indigenous people live in harmony with their respective environmental conditions by applying local traditions and knowledge. One of these groups is the Duano tribe who live on the east coast of Jambi province. The Duano tribe has unique traditions and local knowledge of marine resources. The Duano people, also known as the Sea Tribe, have a unique way of life that is different from society in general. The Duano tribe has a rich cultural heritage of utilizing marine resources and natural phenomena that are an integral part of their daily lives. Apart from being guidelines for marine resource management, some of these local traditions and knowledge actually contain natural science concepts. The concept of science is found in local traditions and knowledge, from the perspective of learning pedagogy based on traditions and local wisdom (wisdom) which leads to more meaningful learning (contextual learning). It will be easier for students to understand the material because they are already familiar with the material and not familiar with the context they are studying. Ethnoscience-based learning indirectly contributes to the preservation of cultural traditions and local wisdom which are currently increasingly marginalized due to developments over time. The younger generation is generally no longer interested in learning and passing on cultural traditions that have been preserved in the memories of the oldest indigenous communities (tribes) and their respective tribal leaders. This research is qualitative research using an ethnographic approach. Data collection was carried out through observation, interviews and documentation related to the cultural traditions of the Duano community, especially those living in Tanjung Jabung Regency, East Tanjung Jabung Regency, Jambi Regency, Tanjuk Solok District, Kuala Jambi Regency. The main respondents of this research are community leaders in Duano Jambi and people who have knowledge and information about local traditions and natural resource management. The data obtained was analyzed qualitatively using the Spradley model. The interview results were analyzed using the QDA Miner Lite application. The results of the exploratory study show that the concept of science is based on the traditions of the Duano Tribe and local knowledge. The traditions of the Duano people are *menongkah*, *mutik sumbun*, *kelung*, *naek house*, *turun mandi*, *menyemah laut*, *betangas* and *Nuak*. The local knowledge of the Duano community includes marine ecology, local marine astronomy (stars, moon, waves, ocean currents), ethnic cuisine, medicine, health, batik art, and Based on QDA Miner Lite analysis, there are widely known traditions such as local wisdom of marine ecology and pick up the wick *mutik*. The innovation of this research is a collection of ethnoscience called Duano ethnoscience, which consists of ethnoecology, ethnofoods, ethnobiology, ethnopysics, ethnochemistry, ethnomaritime, etnoecology, and ethnomathematics. This potential becomes the basis for learning science concepts. This study contributes to the development of understanding of science from a local perspective and the development of science and science education in Indonesia based on the local context of knowledge, traditions and local wisdom of Jambi Indonesia.

Keywords: *Natural science concepts, traditions, local knowledge, Duano tribe*