ABSTRAK

M. Anjelina Dede. (2023). *Skripsi*. **Eksplorasi Etnomatematika pada Bangunan Uma Lengge Beserta Budaya Sekitar Di NTB dan Implementasinya dalam Lembar Kerja Peserta Didik Materi Prisma Segitiga. Program Studi Pendidikan Matematika, Jurusan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.**

Tujuan penelitian adalah (1) untuk mengkaji aspek sejarah, perkembangan, aspek filosofis, dan proses pembangunan, (2) aspek matematis melalui enam aktivitas fundamental matematis yang ada pada bangunan tradisional *Uma Lengge* di Bima, Nusa Tenggara Barat, dan (3) untuk mengembangkan suatu media pembelajaran matematika berupa Lembar Kerja Peserta Didik (LKPD) sebagai implementasi dari kajian etnomatematika yang telah dilakukan. Jenis penelitian yang digunakan, yakni penelitian kualitatif dengan pendekatan etnografi. Subjek dalam penelitian ini adalah Bapak Muhlis selaku pengelola bangunan tradisional *Uma Lengge*, dan Bapak Iskandar Body selaku warga dan pemerhati bangunan Uma Lengge. Instrumen yang digunakan, yaitu peneliti, lembar observasi, dan pedoman wawancara. Metode pengumpulan data berupa observasi, wawancara, dan dokumentasi. Analisis data yang digunakan adalah analisis data interaktif menurut Miles dan Huberman yang terdiri dari reduksi data, sajian data, dan penarikan kesimpulan.

Adapun hasil yang diperoleh dalam penelitian ini, yaitu sebagai berikut. 1) Terkait dengan sejarah Uma Lengge yang sudah ada sebelum berdirinya kerajaan Bima pada abad VIII masehi. Uma Lengge pada mulanya dijadikan sebagai tempat tinggal, dan lumbung padi oleh masyarakat suku *Mbojo*. Uma Lengge dibangun dengan alas dan bentuk yang tinggi untuk menghindari binatang buas. Atap berbentuk mengerucut agar bangunan Uma Lengge tidak terbebani oleh air hujan, abu gunung meletus, dan terpaan angin. 2) Aktivitas fundamental matematis pada bangunan tradisional Uma Lengge adalah a) *counting*: mengetahui banyaknya bangunan Uma Lengge yang ada di Desa Maria, Kecamatan Wawo, b) *locating*: penempatan lokasi bangunan Uma Lengge, c) *measuring*: penggunaan metode pengukuran konvensional berupa hasta, depa, dan tongkat kayu, d) *designing*: mengetahui bentuk geometris pada bangunan Uma Lengge, e) *playing*: mengetahui aturan dalam atraksi *mpa'a manca* sebagai bagian dari upacara adat rutin masyarakat suku *Mbojo*, di desa Maria, f) *explaining*: makna filosofi bentuk bangunan Uma Lengge. 3) Materi pelajaran matematika Sekolah Menengah Pertama dalam Kurikulum Merdeka yang ditemukan pada bangunan Uma Lengge yaitu bilangan, aljabar, pengukuran, geometri, analisis data, dan peluang. Berdasarkan kajian yang dilakukan, disusun Lembar Kerja Peserta Didik (LKPD) pengukuran bangun ruang prisma segitiga sebagai salah satu implementasi dalam pembelajaran matematika.

Kata kunci: etnomatematika, uma lengge, lembar kerja peserta didik (LKPD)

ABSTRACT

M. Anjelina Dede. (2023). Undergraduate Thesis. Ethnomathematics Exploration of the Uma Lengge Building and its Surrounding Culture in NTB and Its Implementation in the Triangular Prism Material Student Worksheets. Mathematics Education Study Program, Department of Mathematics and Science Education, Faculty of Training and Education, Sanata Dharma University.

The aims of the research are (1) to examine historical, developmental, philosophical aspects, and development processes, (2) mathematical aspects through six fundamental mathematical activities in the traditional Uma Lengge building in Bima, West Nusa Tenggara, and (3) to develop a mathematics learning media in the form of Student Worksheets (LKPD) as an implementation of the ethnomathematics studies that have been carried out. This is a qualitative research with an ethnographic approach. The subjects in the study were Mr Muhlis as the manager of the Uma Lengge traditional building, and Mr Iskandar Body as a resident and observer of the Uma Lengge building. The instruments of the research were researchers, observation sheets, and interview guides. Methods of data collection in the form of observation, interviews, and documentation. The data were analyzed using interactive data analysis according to Miles and Huberman which consists of data reduction, data presentation, and drawing conclusions.

The results obtained in this study are as follows. 1) Historically, Uma Lengge existed before the Kingdom of Bima were established in the 8th century. Uma Lengge were used as a living place and rice storage by people of Mbojo tribe. Uma Lengge was built on a high foundation to prevent the wild animal. It has roof of a form of cone so the building will strong against heavy rain, volcano ashes, and strong wind. 2) The fundamental mathematical activities of traditional Uma Lengge buildings are a) counting: knowing the number of Uma Lengge buildings in Maria Village, Wawo District, b) locating: locating the location of Uma Lengge buildings, c) measuring: using conventional measurement methods in the form of cubits, fathoms, and wooden sticks, d) designing: knowing the geometric shapes on the Uma Lengge building, e) playing: knowing the rules in the mpa'a manca attraction as part of the routine traditional ceremony of the Mbojo tribe community, in Maria village, f) explaining: the meaning of philosophy the shape of the Uma Lengge building. 3) The study found topics on mathematics for junior high schools in the Merdeka Curriculum related to the Uma Lengge building, namely numbers, algebra, measurement, geometry, data analysis, and probability. Based on the finding, this study made a Student Worksheets (LKPD) on triangular prism shapes as one of the implementation of the study into mathematics teaching.

Keywords: *ethnomatematics, uma lengge, student worksheet (LKPD)*