

ABSTRAK

Tira Intan Maulidya, 2020. Kajian Etnomatematika Terkait Aktivitas Pertanian Tembakau di Kabupaten Temanggung, Jawa Tengah dan Implementasinya dalam Pembelajaran Matematika. Skripsi. Program Studi Pendidikan Matematika. Universitas Sanata Dharma Yogyakarta.

Penelitian ini bertujuan untuk: (1) mengetahui proses budidaya tanaman Tembakau secara rinci, sejak dari penyiapan lahan, penanaman, pemanenan, pengeringan tembakau, hingga penjualan tembakau ke pabrik-pabrik rokok; (2) mengetahui kebudayaan, penggunaan paham-paham tradisional dan perhitungan-perhitungan tradisional pada aktivitas pertanian Tembakau di Kabupaten Temanggung, Jawa Tengah; (3) mengetahui apa saja aktivitas fundamental yang terdapat pada aktivitas pertanian Tembakau Kabupaten Temanggung, Jawa Tengah; (4) mengetahui apa saja aspek-aspek matematis yang terdapat pada aktivitas pertanian Tembakau di Kabupaten Temanggung, Jawa Tengah yang dapat diimplementasikan dalam proses pembelajaran matematika di sekolah.

Jenis penelitian yang digunakan pada penelitian ini adalah penelitian deskriptif kualitatif. Narasumber dalam penelitian ini adalah aktivitas pertanian tembakau yang dilakukan oleh petani di kalangan masyarakat kabupaten Temanggung. Narasumber dalam penelitian ini adalah Petani Tembakau, Juragan Tembakau, dan tokoh masyarakat yang mendalami budaya pertanian di Temanggung.

Hasil Penelitian menunjukkan bahwa terdapat aspek budidaya, budaya, dan matematis. Pada aspek budidaya tembakau ditemukan bagaimana melakukan budidaya tembakau dari penyiapan lahan, pembibitan, penanaman, hingga penjualan tembakau kepada pabrik rokok. Pada aspek budaya pertanian tembakau di Temanggung ditemukan dua budaya pertanian yang masih dilakukan yaitu Ritual Selamatan dan Pranata Mangsa (Kalender Pertanian). Sedangkan pada aspek matematis ditemukan aktivitas fundamental matematis menurut Bishop yaitu *locating, designing, measuring, counting, playing*, dan *explaining*. Aspek matematis yang ditemukan ini dapat diterapkan dalam materi pembelajaran matematika, khususnya diimplementasikan dalam bentuk soal kontekstual pada materi Bilangan, Himpunan, Bentuk Aljabar, Persamaan dan pertidaksamaan linear satu variabel, Perbandingan, Aritmatika Sosial, Garis dan Sudut, Segiempat dan segitiga, Penyajian data, Pola bilangan, Koordinat kartesius, Relasi dan Fungsi, Persamaan garis lurus, Sistem Persamaan Linear Dua Variabel, Statistika, Peluang, dan Transformasi.

Kata kunci : Aktivitas Pertanian Tembakau, Budaya Pertanian, Etnomatematika, Aktivitas Fundamental Matematis.

ABSTRACT

Tira Intan Maulidya, 2020. Ethnomathematics Study on Tobacco Farming Activities in the Temanggung District, Central Java and It's Implemetation in Mathematics Learning. Undergraduate Thesis. Mathematics Education Study Program, Department of Mathematics and Science Education, Faculty of Teacher Training and Education, Sanata Dharma University Yogyakarta.

The aims of this research were: (1) to find out the process of tobacco cultivation in detail from the preparation of the land, planting, harvesting, drying of tobacco, to the sale of tobacco to cigarette factories; (2) to find out the culture, the use of traditional ideas and traditional calculations in Tobacco farming activities in Temanggung District, Central Java; (3) to find out the fundamental traditional activities contained in tobacco farming activities in the Temanggung District, Central Java; (4) to find out what are the mathematical aspects contained in tobacco farming activities in the Temanggung District, Central Java, which can be implemented in the mathematics learning process in school.

The type of research used in this research is descriptive qualitative research. The respondents in this study were tobacco farmers, tobacco traders, and community leaders who explore the culture involved in agriculture in Temanggung District.

The results of this research showed that there are aspects of cultivation, culture, and mathematics. In the aspect of tobacco cultivation it was found how to do the tobacco cultivation. land preparation, nursery planting to the sale of tobacco to cigarette factories. In the aspect of tobacco farming culture, it is found two agricultural rituals, that are still being carried out namely Ritual Selamatan and Pranata Mangsa (Agricultural Calender). While the mathematical aspects of the fundamental mathematical activities according to Bishop are locating, designing, measuring, counting, playing, and explaining. The mathematical aspects found can be applied in mathematics learning material, specifically implemented in the form of contextual problems on the Number, Sets, Algebraic Forms, Equations and Inequalities, Linear One Variable, Comparison, Social Arithmetic, Lines and Angles, Quadrilateral and Triangles, Data Presentation, Number Patterns, Cartesian Coordinates, Straight-Line Equation Relations and Functions, Two-Variable Linear Equation System, Statistics, Probability, and Transformation.

Keywords: Agricultural Tobacco Activities, Agricultural Culture, Ethnomathematics, Mathematical Fundamental Activities.