

ABSTRACT

SYLVIA ALDRIANI. NIM 3123131059. Morphology Studies Lau Borus River in Karo As a result of Cold Lava Post-eruption of Volcano Sinabung in 2016. Thesis, Department of Geography Education, Faculty of Social Sciences, State University of Medan, 2016.

The research was conducted in the Lau Borus river flow, Karo in 2016. The objectives were to determine the morphology of river flow as a result of lahar flow after the eruption of Sinabung volcano and to investigate the characteristics of Lau Borus River after bypassed cold lava flow.

The research population was the Lau Borus river flow in Karo. Data collection techniques were survey techniques and documentary studies. Data processing techniques were descriptive and qualitative. The parameters that used to measure the river morphology changes were the river flow, the high of riverbank, the width of riverbank, the width of the river, and the river gradient.

The results show that the river gradient was 2.4%. High of riverbank in the right side of the river was 0.52 - 2.71 m. High of riverbank in the left side of the river was 1.06 - 3.17 m. The width of riverbank in the right side of the river was 0.3 - 46.36 m. The width of riverbank in the left side of the river was 1.08 - 36.15 m. The velocity of Lau Borus River flow was 3.84 m³/s. The river width was 7.01 - 156.58 m. Moreover, the characteristics of the upstream are not flowing by lahar flow. The middle of the river was flowing by lahar flow. The downstream of the river was flowing by lahar flow.

Keywords: river morphology, lava flow, Sinabung



ABSTRAK

SYLVIA ALDRIANI. NIM 3123131059. Kajian Morfologi Sungai Lau Borus di Kabupaten Karo Akibat Lahar Dingin Pasca Erupsi Gunungapi Sinabung Tahun 2016. Skripsi Jurusan Pendidikan Geografi, Fakultas Ilmu Sosial, Universitas Negeri Medan 2016.

Penelitian ini dilaksanakan di aliran Sungai Lau Borus, Kabupaten Karo pada Tahun 2016. Penelitian ini bertujuan untuk mengetahui keadaan morfologi aliran sungai akibat lahar dingin pasca erupsi Gunungapi Sinabung dan mengetahui karakteristik Sungai Lau Borus sesudah dilewati aliran lahar dingin. Populasi dalam penelitian ini adalah aliran Sungai Lau Borus, Kabupaten Karo. Teknik pengumpulan data dengan teknik *survey* dan teknik studi dokumenter. Teknik pengolahan data secara deskriptif kualitatif. Instrumen yang digunakan untuk mengukur perubahan morfologi sungai yaitu debit aliran sungai, tinggi tebing, lebar tebing, lebar sungai, dan gradien sungai.

Gradien sungai adalah 2,4%. Tinggi tebing sebelah kanan sungai adalah 0,52 – 2,71 m. Tinggi tebing sungai sebelah kiri adalah 1,06 – 3,17 m. Lebar tebing sungai sebelah kanan adalah 0,3 – 46,36 m. Lebar tebing sebelah kiri adalah 1,08 – 36,15 m. Debit Sungai Lau Borus adalah 3,84 m³/s. Lebar sungai adalah 7,01 – 156,58 m. Karakteristik sungai di bagian hulu tidak dialiri oleh aliran lahar dingin, bagian tengah aliran sungai dialiri oleh aliran lahar dingin, bagian hilir dialiri oleh aliran lahar dingin.

Kata kunci : Morfologi Sungai, Aliran Lahar Dingin, Sinabung

