

ABSTRAK

Pelabuhan perikanan Tanjung Adikarta Kabupaten Kulon Progo terletak pada pantai Selatan Jawa dan berbatasan langsung dengan Samudera Hindia. Sedimentasi di alur pelayaran pelabuhan mengakibatkan aktivitas perikanan terganggu. Penelitian bertujuan untuk mengetahui pengaruh pasang surut terhadap *bedload* sedimen di perairan tersebut. Sampel sedimen dikoleksi menggunakan *bedload sampler* yang diletakkan di alur perairan pelabuhan selama 3 menit dengan kedalaman 50 cm. Sedimen kering diayak menggunakan saringan bertingkat (2000-4000; 1000-2000; 500-1000; 250-500; 125-250; 63-125; dan 4-63 μm), ditimbang berat rata-rata, dan ditentukan diameter rata-rata (D_{50}). Data pasang surut diunduh dari website www.big.go.id dan diolah menggunakan Mike 21. Tipe pasang surut untuk perairan Pelabuhan Tanjung Adikarta Kabupaten Kulon Progo diperoleh semidiurnal. Massa rata-rata *bedload* sedimen diperoleh saat pasang lebih berat dibandingkan saat surut, dan *bedload* sedimen saat pasang dan surut didominasi oleh pasir halus. Pasang surut berpengaruh terhadap *bedload* sedimen. Saat pasang purnama (*spring tide*) massa sedimen lebih berat dibanding saat pasang perbani (*neap tide*) karena ketinggian air saat pasang purnama lebih tinggi dibanding saat pasang perbani.

Kata kunci : Pasang surut, *Bedload*, massa rata-rata, diameter rata-rata, Pelabuhan Tanjung Adikarta

ABSTRACT

The fishing Port of Tanjung Adikarta, Kulon Progo Regency is located on the South coast of Java and is directly adjacent to the Indian Ocean. Sedimentation that occurs in channel has disrupted fishing activities. The study aims to determine the effect of tidal on sediment bedload in the waters. Sediment samples collected using a bedload sampler that placed in the channel for 3 minutes in 50 cm depth. Dried sediment are sieved using stratified sieves (2000-4000; 1000-2000; 500-1000; 250-500; 125-250; 63-125; and 4-63 μm), be weighed of average weight, and determined average diameter (D50). Tidal data is downloaded from the website www.big.go.id and the data processed using Mike 21. Tidal type of the fishing Port of Tanjung Adikarta Kulon Progo Regency was obtained semidiurnal. Average mass of sediment bedload at high tide was obtained heavier than at low tide and sediment bedload at high tide and low tide was dominated by fine sand. Tides effected the bedload sediments. When the spring tide, sediment mass was heavier because the water level was higher than the neap tide.

Keywords : *Tide, bedload, average mass, average diameter, Tanjung Adikarta Port*

