INTISARI

Kabupaten Bangka Tengah masih menghadapi permasalahan keterbatasan akses air bersih karena cakupan jaringan perpipaan baru mencapai 43,27% wilayah pelayanan. Sebagian besar masyarakat masih bergantung pada sumur dangkal dan rentan mengalami kekurangan air saat musim kemarau. Di sisi lain, terdapat ribuan *kulong* yang dapat berpotensi dimanfaatkan sebagai sumber air baku. Penelitian ini bertujuan untuk menganalisis bobot kriteria multi-dimensi dalam penentuan *kulong* prioritas sebagai sumber air baku, mengidentifikasi karakteristik lima *kulong* berpotensi di Kabupaten Bangka Tengah, dan menetapkan peringkat prioritas *kulong* yang layak dikembangkan. Metode yang digunakan mencakup pembobotan kriteria menggunakan *Analytical Hierarchy Process* (AHP) dan penentuan peringkat *kulong* dengan tiga metode *Multi Attribute Decision Making* (MADM), yaitu *Simple Additive Weighting* (SAW), *Weighted Product* (WP), dan *Technique for Order Preference by Similarity to Ideal Solution* (TOPSIS). Lima kriteria utama dalam analisis adalah kualitas air, kapasitas tampungan, persepsi masyarakat, kesesuaian tata ruang, dan aksesibilitas. Data primer diperoleh melalui pengujian laboratorium dan kuesioner, sedangkan data sekunder diperoleh dari instansi terkait. Hasil AHP menunjukkan kualitas air memiliki bobot tertinggi sebesar 41,3%, diikuti oleh ketersediaan air (26,9%), keinginan masyarakat (14,0%), kesesuaian lokasi (10,8%), dan aksesibilitas (6,9%). Seluruh *kulong* dikategorikan tercemar ringan. Metode SAW dan WP secara konsisten menempatkan Kulong Nibung sebagai prioritas utama. Metode TOPSIS menempatkan Kulong Barito di peringkat pertama karena kapasitas tampungannya yang paling besar. Hasil ini menjadi dasar dalam menentukan *kulong* yang layak dikembangkan sebagai sumber air baku secara berkelanjutan di Kabupaten Bangka Tengah.

Kata Kunci : *kulong,* prioritas pemanfaatan, lahan pascatambang, air baku, keputusan multikriteria

ABSTRACT

Central Bangka Regency still faces the problem of limited access to clean water because the pipeline network coverage has only reached 43.27% of the service area. Most people still rely on shallow wells and are vulnerable to water shortages during the dry season. On the other hand, there are thousands of kulongs that can potentially be utilized as raw water sources. This study aims to analyze the weight of multi-dimensional criteria in determining priority kulongs as raw water sources, identify the characteristics of five potential kulongs in Central Bangka Regency, and determine the priority ranking of kulongs that are worth developing. The methods used include weighting criteria using Analytical Hierarchy Process (AHP) and ranking kulongs using three Multi Attribute Decision Making (MADM) methods, namely Simple Additive Weighting (SAW), Weighted Product (WP), and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS). The five main criteria in the analysis were water quality, storage capacity, community perception, spatial suitability, and accessibility. Primary data were obtained through laboratory testing and questionnaires, while secondary data were obtained from relevant agencies. AHP results show that water quality has the highest weight of 41.3%, followed by water availability (26.9%), community desire (14.0%), location suitability (10.8%), and accessibility (6.9%). All kulongs were categorized as lightly polluted. SAW and WP methods consistently placed Kulong Nibung as the top priority. The TOPSIS method ranked Kulong Barito first due to its largest storage capacity. These results provide a basis for determining which kulongs are feasible to develop as raw water sources in a sustainable manner in Central Bangka Regency.

Keywords: *kulong, utilization priority, post-mining land, raw water, multicriteria decision*