ABSTRAK

RESSY ROSALINI FARA 2023. Strategi Pengelolaan Sistem Penyediaan Air Minum Berkelanjutan (Studi Kasus Ketersediaan Air Bersih Di Kota Jayapura), Tesis (2023). Dibimbing oleh Dr. Frans Asmuruf, M.Si dan Dr. Johnson Siallagan, M.Si. Kehadiran PDAM diamanatkan dalam Undang – Undang Nomor 5 Tahun 1962 sebagai kesatuan usaha milik pemerintah daerah yang memberikan jasa pelayanan dan menyelenggarakan kemanfaatan umum di bidang air minum. Cakupan wilayah PDAM Jayapura adalah Kota Jayapura dan Kabupaten Jayapura, dimana mampu memproduksi air bersih dengan kapasitas 924 liter/ detik. Ketersediaan air bersih menjadi salah satu faktor pendukung dalam peningkatan kemampuan masyarakat untuk memenuhi kebutuhan sehari – hari. Permasalahan saat ini adalah ketidak seimbangan antara pertumbuhan penduduk yang terus berkembang dan kapasitas produksi yang belum bertambah. Penelitian ini bertujuan menganalisis kuantitas, kualitas dan kontinuitas pengaliran air melalui sistem perpipaan, daya dukung air, persepsi pelanggan atas pelayanan PDAM dan analisis faktor internal dan eksternal PDAM.

Hasil penelitian di 4 Reservoar dengan debit produksi Januari 2022 sebesar 296 l/det hingga Desember menurun menjadi 269 l/det. Indikasi akibat adanya perambahan hutan dihulu sumber air, dikaki pegunungan cycloop yaitu aktivitas pembukaan lahan untuk pertanian, peternakan dan pemukiman warga. Pada 4 reservoar ; Reservoar Ajen Beton, STT Abepura, Perumnas III berturut turut dalam status mutu air cemar sedang hingga ringan, sedangkan Reservoar Skyline status mutu baik karena memenuhi baku mutu air. Untuk daya dukung air diprediksikan pada 2032 akan terjadi defisit air di Kota Jayapura, dimana Ketersediaan air (SA) = 93.676.705,94 m3/tahun < kebutuhan air (DA) 1.467.504.000 m3/ tahun. Persepsi pelanggan sebanyak 67,66 % setuju/ puas dengan pelayanan PDAM. Strategi S-O dijadikan sebagai strategi prioritas sebagaimana posisinya pada kuadran I yaitu : Peningkatan akses layanan air minum, Peningkatan kualitas SDM melalui study banding dengan PDAM Kota lain, mengembangkan kerja sama dengan instansi teknis bidang air bersih dan lembaga swasta serta menjaga mutu kualitas air dalam bentuk pengamanan sumber air baku melalui koordinasi lintas sektor dan keterlibatan lembaga adat.

Key Word : Daya dukung air, Kuantitas, Kualitas dan Kontinuitas,Persepsi Pelanggan, Strategi, SWOT.

ABSTRACT

RESSY ROSALINI FARA 2023. Management Strategy For Drinking Water Sustainable Supply System (Case Study of Clean Water Availability in Jayapura City), Thesis (2023). Supervised by Dr. Frans Asmuruf, M.Si, and Dr. Johnson Siallagan, M.Si. The presence of PDAM is regulated in Law Number 5 of 1962 as a regional government-owned business unit that provides services and organizes public benefits of drinking water. The coverage area of PDAM Jayapura is Jayapura City and Jayapura Regency, which can produce clean water with a 924 liters/second capacity. The availability of clean water is one of the supporting factors in increasing the ability to fulfill community daily needs. The current problem is an imbalance between population growth that continues to grow and production capacity that has not increased. This study aims to analyze the quantity, quality, and continuity of water flow through the piping system, water carrying capacity, customer perceptions of PDAM services, and PDAM internal and external factor analysis.

The research resulted in 4 reservoirs with a production discharge in January 2022 of 296 l/s and a decrease in December of 269 l/s. It is due to the encroachment on the water source in the forest upstream, at the piedmont of the Cycloop Mountains, which are land clearing activities for agriculture, animal husbandry, and residential areas. In 4 reservoirs, The Ajen Beton Reservoir, STT Abepura, and Perumnas III, respectively, have moderate to lightly polluted water quality status. Meanwhile, the Skyline reservoir has good quality status because it meets water quality standards. For water carrying capacity, it is predicted that in 2032 there will be a water deficit in Jayapura city, where water availability (SA) = 93,676,705.94 m3/year < water demand (DA) 1,467,504,000 m3/year. Customer perceptions of as much as 67.66% agree/ satisfied with PDAM services . The S-O strategy is used as a priority strategy to its position in quadrant I, namely: Increasing access to drinking water services, Improving the human resources quality through comparative studies with PDAMs in other cities, developing cooperation with clean water technical agencies and private institutions to maintain the water quality in the form of securing raw water sources through cross-sectoral coordination and the involvement of traditional institutions.

Keywords: Water carrying capacity, Quantity, Quality and continuity, Customers Perception,

Strategy, SWOT.