ABSTRACT

Household Liquid Waste Management Achievement Under the Fifth Pillar of Community-Based Total Sanitation in Samarinda

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Background : Poor household wastewater management can cause stagnant water, vector breeding sites, and environmental contamination, increasing public health risks. In 2025, 508,804 of 1,194,251 registered family units (42.60%) in East Kalimantan were recorded as meeting Pillar 5 of Community-Based Total Sanitation (STBM). Disparities within Samarinda remain insufficiently described

Objective : To describe recorded household wastewater management coverage across Samarinda's subdistricts and urban villages in 2025

Methods : We conducted a descriptive analysis of secondary administrative STBM data reported for 2025, covering 282,192 registered family units (KK), 59 urban villages, and 10 subdistricts. Coverage was calculated as family units recorded as meeting the household wastewater management indicator (PLCRT) divided by all registered family units. Consistent with Indonesian Ministry of Health Regulation No. 3/2014, management involves preventing stagnant wastewater, odors, and vector breeding; separating bathroom and kitchen wastewater from toilet effluent; and providing appropriate drainage or infiltration. Community health center staff reportedly collected questionnaire data and performed field checks; higher-level spot checks remained planned. Urban villages were grouped into four descriptive categories (<25%, 25–<50%, 50–<75%, and ≥75%), not official STBM thresholds

Results : Of 282,192 family units, 141,123 (50.01%) were recorded as meeting Pillar 5. Coverage ranged from 23.57% in Samarinda Seberang to 84.06% in Samarinda Kota (60.49 percentage points). Among 59 urban villages, 19 (32.20%) fell below 25%, 6 (10.17%) were at 25–<50%, 7 (11.86%) at 50–<75%, and 27 (45.76%) at ≥75%. The 19 low-coverage villages were located in Samarinda Ulu (4); Palaran and Samarinda Seberang (3 each); Loa Janan Ilir, Sungai Kunjang, and Sungai Pinang (2 each); and Samarinda Ilir, Samarinda Utara, and Sambutan (1 each)

Conclusion : Approximately half of Samarinda's registered family units were recorded as meeting STBM Pillar 5, with marked geographic disparities. Low-coverage areas warrant prioritized data verification and program monitoring. Potential reporting bias, a lack of determinant data, and missing documentation of higher-level verification limit interpretation of the findings

Keyword : community-based total sanitation; household wastewater management; STBM Pillar 5; sanitation monitoring; Samarinda