

The sisal industry in Kenya has been among the world leading producer of sisal. During sisal leaf decortications, only 2.7-7.3% of the leaf produces the fiber. Through auditing, in the year 2010, Kenya generated 611, 875 tonnes and 3, 511, 900 m³ of sisal solid waste and wastewater, respectively. Total and volatile solids, cellulose and hemicelluloses contents in the wastes were in the ranges of 12-84%, 67-83%, 55.7-76.7% and 3.7-21.6% on dry weight basis, respectively. This study has shown anaerobic co-digestion of solid sisal waste with cow manure is a feasible process with normalized methane yields of 0.301 and m³/KgVS.