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Investigating Impacts of Human Urine as a Fertilizer in Khwisero, Kenya

Since 2006, EWB-MSU has implemented 10 composting latrines in Khwisero, Kenya. Composting latrines are improved sanitation projects that turn human feces and urine into agricultural fertilizers for primary schools fields. Urine contains forms of nitrogen and other nutrients essential to fertilizers. In viewing human waste as a resource to be capitalized upon instead of a detriment to well-being, the implementation of composting latrines have the potential to cultivate social, agricultural, and economic profits for primary schools and surrounding communities. This research investigated urine management, correct application as fertilizer, and impacts on agricultural plots at primary schools. Data was collected through a literature review and participative observation at primary schools on urine usage, income generating activities, and agriculture in Khwisero. Results show varying urine application and management methods at primary schools. Some schools incoming generating activities increased more than others after the implementation of composting latrines. From the data, educational material was developed and a participatory training was conducted to inform stakeholders on safe practices. Further research should investigate agricultural impacts of urine fertilizer over the long term, should contribute to continuous improvement on trainings to stimulate interest on income generating activities, and promote collaboration in Khwisero on organic farming practices.