

Recycling Nutrients from Organic Wastes in Kenya's Capital City

Mary, Njenga; Dannie, Romney; Nancy, Karanja; Kuria, Gathuru; Stephen, Kimani; Sammy, Carsan; Will, Frost

Date: 2010

Abstract

The question how much of the potential soil nutrients contained in urban wastes are being used and what processes are involved led to this study in the early 2000s. The issue is of central importance to understanding the potential benefits of a properly managed urban agriculture sector, since soil fertility is a major problem in Sub-Saharan Africa and urban wastes represent a large potential source of nutrients (Savala et al. 2003). Mougeot (1993, p.114) highlighted the importance of solid waste management and offered insights into the use of organic wastes by farmers as compost for their crops. When the Consultative Group on International Agricultural Research (CGIAR) was starting up its new system-wide program – Urban Harvest – in Africa in late 2000, stakeholders called for better documentation of these processes. In response, we came together from a number of institutions in Kenya to identify and map out the basic market and material flows for composts and manure in Nairobi and identify opportunities for improving the functioning of the system. Several of us were also involved in a UN meeting at the end of 2001 on the links between waste management and urban agriculture (Kahindi et al. 2001), and the two CGIAR centers based in Nairobi both had a stake in the issue. The International Livestock Research Institute (ILRI) had done some preliminary work in 15 countries on crop–livestock system intensification in peri-urban areas (Staal 2002), and the World Agro forestry Centre (ICRAF) was interested in market chains involving urban nurseries using compost and manure. Coming as well from a local NGO and a national research organization, we formed an interdisciplinary team. Participatory methods were employed because a basic value underlying our collective approach was that research has a greater impact if the potential users of its results are engaged in the process and have a stake in the outcome.