Inappropriate soil management practices are cited as the main causes of soil fertility decline of cultivated lands in sub-Saharan Africa (SSA). Small-scale farmers are faced with daunting challenges and limited opportunities for maintaining the productivity of their land due to low accessibility and affordability of agricultural inputs. In Kenya, a series of fertilizer trials conducted throughout the country in the 1990s, showed that nitrogen (N) and phosphorus (P) were deficient in 57% and 26% of the sites covered. The effect of continued cultivation with application of mineral and organic fertilizers on soil quality and crop yields was studied in a long-term field experiment at Kabete, in the highlands of Kenya, which was started in 1976. The area is sub-humid with an average bimodal rainfall of 980 mm and two cropping seasons per year. The treatments included: control (no-input); fertilizer nitrogen (N) and phosphorus (P) at 60 kg N/ha and 26 kg P/ha, and 120 kg N/ha and 52 kg P/ha; farmyard manure (FYM) at five (5) and ten (10) t/ha and farmyard manure (5 t/ha) combined with 60 kg N and 26 kg P/ha. For each treatment, crop residues were retained (+) or removed (−) in half of the plots. Maize and beans were planted during the long and short rain seasons, respectively. This paper presents a review of experimental results derived from the long-term experimental site at Kabete, Kenya over a period of 30 years. Results indicate that application of all inputs significantly ($p = 0.05$) improved maize yields over the control but there was no significant differences among the treatments. Cumulative use of FYM gave better yields than NP fertilizers but the combined use of FYM and inorganic fertilizers was the most economically and promising strategy for sustained soil crop yields A general decline in soil bio-physical properties was observed over time. Soil acidification, decline in soil organic carbon and nitrogen has been noted over time. Use of inorganic fertilizers without addition of FYM or crop residues led to loss of soil biodiversity. None of the strategies used have maintained carbon stocks at the initial level. Integrated use of farmyard manure and chemical fertilizers, combined with liming to reduce soil acidification and use of deep rooted rotational crops should be recommended to sustain soil productivity under continuous cultivation.