

In a comparative study of cultivated and uncultivated adjacent soils, changes in carbon, nitrogen and phosphorus were examined. Three soil profiles (0-100 cm) were sampled at increments of 10 cm and analysed. The 3 sample profiles represented a Chromic Luvisol and 2 Nitosols, representing soils used most intensively for cultivation in Kenya. Carbon and nitrogen showed a declining trend in the layer of the 3 cultivated soils. Changes ranged between 14.8% for carbon, and 3.7% and 15.2% for nitrogen. For phosphorus the cultivated soils had slightly higher amounts within the plough layer than the uncultivated soils. At lower depths, there was virtually no marked difference between the cultivated and uncultivated soils. The magnitude of change in the cultivated soils is attributed to the duration of land use and soil management practices.