

Title Farmers earn more money when banana and coffee are intercropped

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Abstract

In Uganda, coffee and banana form the economic base for the majority of small scale farmers. Uganda is the largest banana producer and 2nd largest coffee producer in Africa. Both crops are predominantly grown as monocultures. However, banana-coffee intercropping is frequently observed, especially in highly populated areas. This study characterized banana mono-cropping, coffee mono-cropping and banana-coffee intercropping systems in seven Ugandan districts, in order to assess the profitability of mono-cropping and intercropping systems. Information on resource use (i.e. external inputs, labor, and land) and farm gate prices were obtained through structured farmer interviews in 2006-2007. crop production, soil fertility, pest and disease pressure, and management practices were quantified at the plot level through field visits. This study showed that banana-coffee intercropping is much more profitable than banana or coffee mono-cropping. In Arabica coffee growing regions (Mt. Elgon area), annual returns/ha averaged USD 3,421, USD 2,092 and USD 1,552 for intercropping, banana mono, and coffee mono systems, respectively. In Robusta coffee growing regions (Masaka, Bushenyi), annual returns per hectare averaged USD 1,576, USD 915 and USD 1,293 for intercropping, banana mono, and coffee mono systems, respectively. In the Mt. Digon area, the large total revenue was achieved through a 9.1% increase in total/ha Arabica yield (i.e. parchment) when compared to coffee mono-cropping, while banana yields only decreased by 17.4% compared to banana mono-cropping. In western Uganda (Masaka, Bushenyi) the total revenue increase when moving from mono to intercropping systems was less spectacular, because Robusta coffee yield (i.e. kiboko) reduced by 31% and banana yields by 25% per hectare, when compared to mono-cropped systems.