

# BANANA-COFFEE SYSTEM

## Earn MORE MONEY in the same field



Banana-coffee intercrop + mulch

Examples of crop yields and values in Ugandan farmers fields\* in 2006

Crop system	Coffee yield green beans (T/ha/yr)	Banana yield (T/ha/yr)	Total yield value (US \$/ha)
Arabica sole	1,2		2364
Banana sole		18	1728
<b>Coffee-banana</b>	1,2	19	<b>4441</b>
Robusta sole	1,3		1286
Banana sole		15	1177
<b>Coffee-banana</b>	1,1	9	<b>1827</b>

\* Arabica in M<sup>†</sup> Elgon area - Robusta in southwest Uganda area

- Coffee yields are almost similar in monocropped and intercropped coffee-banana. The number of coffee trees per hectare decreases slightly when intercropped, but yields per tree are higher.
- In general, banana yields suffer when intercropped with Robusta but not with Arabica.
- Because the coffee yields are not affected, the additional banana production increases the revenue of banana-coffee intercropped fields by 50-60% compared to monocropped coffee fields.

Banana-coffee intercropping is much more profitable than sole planting of either crop.  
**Put banana in coffee fields, but also put coffee in banana fields !**

## Two COMPLEMENTARY crops

- Coffee plants are shade loving and bananas are taller, so there is not much light competition.
- Increased canopy and more self-mulch/litter reduce weed pressure and need for tillage. No-till is beneficial to superficial root systems of banana and coffee.
- Potassium is an important nutrient for both crops, and intercropped coffee often seems less potassium deficient than sole coffee. This may be due to the very high biomass turnover in the banana system, which may bring nutrients into forms more easily available for the plants.



### Risks of banana-coffee system

1. shading can increase coffee berry diseases
2. neither banana nor coffee should be given too much space, else one crop will outcompete the other

How to keep the system balanced:

1. Prune coffee trees and maintain densities : the best ratio is 2 coffee trees for 1 banana mat.
2. Desucker regularly to control banana densities.
3. Banana and coffee will both benefit from mulch.

