

There is no silver bullet solution. Farmers' trade offs: tree benefits

Both women and men. All 'benefit' categories (except carbon/biomass)



MULCH PROVISION

Intercropping gives more leaves which cover the soil better
(man, 30)

Tamarind is best, has a lot of green leaves. Longan has fewer leaves that decompose slowly
(man, 36)

Melia azedarach sheds many leaves that decompose make soils more fertile for coffee
(woman, 57)



FROST DAMAGE

Pine trees are best because they withstand frost and have a wide canopy that covers the coffee. Plum can block hoarfrost and give a lot fruit.
(woman, 41)

Longan, jackfruit, Chinese black olive with big canopy and many thick leaves [tolerate frost]
(woman, 43)



SHADE

Too much shade is not good for coffee. After the coffee harvest, we prune the tamarind to improve air circulation and give even sunlight for the coffee
(woman, 24)



LABOUR REQUIREMENT

Intercropped trees have less weed and require less labour
(woman, 32)



SOIL FERTILITY

Banana, pine, papaya and china-berry grow without fertiliser
(man, 37)

Apricot, papaya, banana do not need fertiliser, remaining fruit trees will not give fruit without fertiliser
(woman, 31)



MICRO CLIMATE

Banana and longan can withstand extreme weather events. If we plant many, the ambient air gets cooler
(woman, 31)



PEST & DISEASE

Banana, papaya, pine have few pests that affect coffee
(woman, 24)



COFFEE PRODUCTION

Tamarind keeps the soil moist and give shades, so coffee plants develop well and give high, good yield
(woman, 28)

Jackfruit and tamarind shade and keep the coffee moist, which gives high yield
(man, 33)



INCOME GENERATION

Plum gives the highest income. With pine I can sell resin and wood
(man, 40)

The more trees I add the more economic benefits. Plums require little management and give a lot of fruit
(woman, 27)



SOIL QUALITY

Jackfruit, peach, plum, grapefruit, and longan make the soil humid and can be intercropped with coffee
(man, 45)

Plum roots make the soil porous
(woman, 28)



WIND DAMAGE

Tall trees with flexible, tough branches and wide canopy give good wind protection for coffee. Jackfruit branches are strong.
(man, 22)

Plum, apricot, peach have elastic stem and deep roots so do not break
(man, 37)



SOIL EROSION

The tamarind's canopy [buffers rainfall before hitting soil surface] and many roots protect against soil erosion
(woman, 36)

