Coffee has the potential to drive reforestation. Countries with large areas of coffee are grown under full sun conditions may have tremendous potential to add tree cover on coffee farms in an effort to buffer coffee from heat stress and to support more general reforestation and climate mitigation goals. Brazil, Vietnam, Indonesia and Mexico all have over 140,000 hectares of coffee (or over 20%) under full sun production systems. Each is predicted to lose at least 35% of their suitable area for coffee production by 2050. Introducing low levels of shade to these farms could help them adapt to climate change and store an addition 6 tonnes of carbon per hectare. Care must be taken to design shade systems that meet the needs of farmers for optimizing coffee production while exploring opportunities for diversifying income via other tree crops and carbon markets.

Coffee may present additional reforestation opportunities beyond these countries – especially where governments are actively seeking to restore degraded or deforested areas via agroforestry systems.

Countries identified:
Brazil, Vietnam, Indonesia, Mexico

### Brazil
- 89% of production is full sun
- -61% high decline in suitable land for coffee based on climate projections (over 35%)
- Ha in full sun / intensified systems (est.) 1,921,118 HA
- Extent of the decline in suitable, non-forest area -53,073,700 HA

### Vietnam
- 75% of production is full sun
- -46% high decline in suitable land for coffee based on climate projections (over 35%)
- Ha in full sun / intensified systems (est.) 385,800 HA
- Extent of the decline in suitable, non-forest area -2,430,000 HA

### Indonesia
- 40% of production is full sun
- -37% high decline in suitable land for coffee based on climate projections (over 35%)
- Ha in full sun / intensified systems (est.) 507,392 HA
- Extent of the decline in suitable, non-forest area -2,720,800 HA

### Mexico
- 20% of production is full sun
- -59% high decline in suitable land for coffee based on climate projections (over 35%)
- Ha in full sun / intensified systems (est.) 148,282 HA
- Extent of the decline in suitable, non-forest area -2,842,100 HA