SCIENCE TALK

Agroforestry Systems for the UN Decade of Ecosystem Restoration
The case of Cocoa Agroforests and Pollination Services

Dr. Manuel Toledo-Hernández
Prof. Thomas Cherico Wanger Guerrero

Achieving ambitious UN restoration goals requires a thorough re-thinking of agricultural systems, given their fundamental importance for human development, but enormous impacts on ecosystems. Traditional agricultural systems seem to provide an alternative to intensive conventional production with robust evidence showing overall ecological, sociocultural, and economic benefits. One example is crop diversification in agroforestry systems, whereby shade trees or understory vegetation is added to tree crop systems such as cocoa, coffee or rubber, enhancing both farmer's income and ecological features.

In this talk, Dr. Manuel Toledo-Hernández and Prof. Thomas Cherico Wanger Guerrero will introduce the Global Agroforestry Network, a global multidisciplinary research effort to use cocoa, coffee, and rubber production systems in the Americas, West Africa, and Asia as case studies to test the effects of spatio-temportal diversification on socioecological systems. We will then use cocoa as case study, to show how the global implementation of ecological tools and machine-learning based monitoring technology is helping to understand the potential of pollination services to boost yields in agroforestry systems, and hence promote ecosystem restoration efforts and people's livelihoods.

Thursday, August 4th, 9 a.m.
Via Teams

Cocoa agroforests of Bahia