

The TRAILS Project

Sabah, Malaysia.



trails-project.org

Contact
alain.rival@cirad.fr

Who we are

The TRAILS project builds on a complementary partnership linking academics, NGOs, and private and public stakeholders. It relies on long-term expertise and multidisciplinary approaches developed in diverse scientific fields.

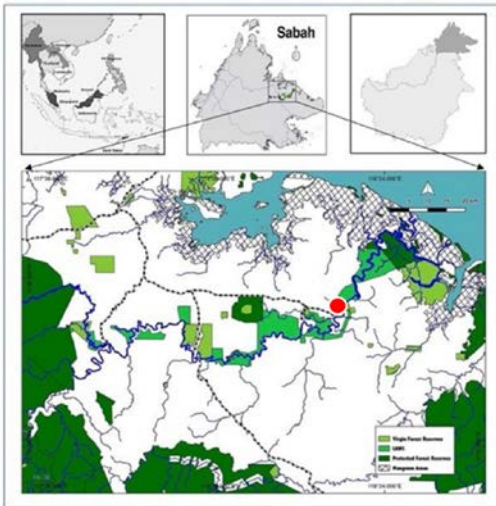
TRAILS deals with agronomy, forestry, conservation and social sciences, working together with major agencies in Sabah (Sabah Agriculture, Forestry, and Wildlife Departments).

FERRERO

Alliance pour
la Préservation
des Forêts



Where we are



The TRAILS Project is located within the 500,000 ha Kinabatangan floodplain region of Eastern Sabah, Malaysia. Today, around 90% of the land is an oil palm-dominated landscape interspersed by 41,103 ha of fully protected but largely disconnected forest fragments, ranging in size from 100 to 7,330 ha. New oil palm plantation development decreased sharply as from 2006.

Today, the remaining forests are highly disturbed, degraded, and fragmented. However, Kinabatangan remains a *Biodiversity Hotspot*, harboring a remarkable diversity and abundance of wildlife, The Kinabatangan orangutan population (about 700 individuals) has survived in one of the most exploited and fragmented landscapes in the State.

Challenges

- Palm oil is the most consumed vegetable oil in the world and its growth has accelerated further with the emergence of new outlets in the agrofuel sector, adding to traditional food and oleochemical uses.
- The expansion of palm cultivation has also caused serious environmental damage, especially through massive deforestation, leading to the rapid erosion of biodiversity and the decline of emblematic species such as orangutans.
- Pilot projects like TRAILS must be installed right now, as ENSO episodes in the region are expected to be stronger and more frequent, with dramatic impacts on humans and wildlife.
- Agroforestry systems are part of the mitigation/adaptation strategy in rural areas of Southeast Asia.
- Connecting oil palm plantations, agroforestry plots, riparian forests, and wildlife sanctuaries will enable the reconstruction of landscape continuity.

Objectives

- To install oil-palm-based agroforestry systems under specific planting designs
- To monitor recolonization by wildlife (abundance, diversity, and mobility of key species)
- To comparatively study the performance of oil palm cultures in traditional and agroforestry-based systems
- To understand key characters of climate resilience through the assessment of key environmental services, (photosynthesis, soil health, water quality, pollination)
- To analyze the socioeconomic impact of the agroecological transition from monospecific plantation to agroforestry systems.



Achievements

Key numbers

Allocated area :	100 ha
Present planted area :	22 ha
Planted forest species :	15
Planted trees :	3,000
Specific planting designs :	3



Sponsorship

SPONSOR	AMOUNT (M€)	STATUS
CIRAD (FR)	0,4	Secured
VELUX Foundation (CH)	0,4	Under reviewing
Ferrero (LUX)	0,5	TBC
SOR4 D (CH)	0,5	Under reviewing
Potential donors	0,6	Under prospection
TOTAL	2,5	

Prospects

- To install the project on a stable trajectory for 4 years, building on a diversified group of sponsors.
- To implement data collection protocols on the agronomic performance of agroforestry systems, wildlife biodiversity, and climatic resilience.
- To disseminate early results to local populations, planters' communities, and the oil palm industry .