The Stability of Altered Forest Ecosystems Project: Investigating the Design of Human-Modified Landscapes for Productivity and Conservation

ABSTRACT

With growing global demands for palm oil, there is mounting pressure on limited natural resources to support the dual services of agricultural productivity and maintenance of biodiversity. Balancing these two services requires detailed research on four themes: i) the impacts on biodiversity of forest conversion and fragmentation, ii) which factors drive these changes in biological communities, iii) what impacts changes have on ecosystem functioning and, iv) the management and design of multifunctional landscapes. Such guestions are often difficult to answer as data must be collected at the landscape scale and over long time periods. The Stability of Altered Forest Ecosystems (SAFE) Project (see www.safeproject.net for more details) is a ground-breaking scientific study based in Sabah, Malaysia which investigates the impacts of forest conversion to oil palm on biodiversity, ecosystem functioning and productivity. Funded by the Sime Darby Foundation with support from Benta Wawasan and the Sabah Forestry Department, the project is a collaboration between research institutions and the oil palm industry. The project takes advantage of a 7 900-ha area of forest which was scheduled for conversion to oil palm in 2012, allowing the consequences of habitat conversion to be directly measured. Now at the beginning of its third year, the SAFE Project is already yielding results of direct relevance to tropical conservation and plantation management. As well as a core team of nearly thirty researchers and research assistants working full-time on the project, SAFE has also provided a platform for collaborative scientists studying a wide range of taxa and ecosystem functions. To date over 90 researchers from 23 different institutions have been involved with research projects in the SAFE area. The SAFE Project provides a good example of the benefits of closer collaboration between stakeholders in the development of conservation initiatives and a more sustainable palm oil industry.