In order to understand the possible impacts of biodiversity loss in tropical ecosystems, the importance of conservation and sustainable management of the forest, and the mitigation and reversal of biodiversity losses through habitat restoration, it is important that long term biodiversity/ecosystem function monitoring and experimental program are established by locally based research institutes and conservation organisations. The major part would be on establishing databases of biodiversity and ecosystem function measurements that include analysis of complex ecological datasets using classical and modern statistical techniques.

A training course on Biodiversity & Ecosystem Functioning, giving emphasis on design of experiment and statistical analysis, has been initiated by The U.K’s Royal Society in collaboration with The Institute for Tropical Biology and conservation, UMS.

The course was funded by Darwin Initiative (UK) through a multilevel training programmes involving key research and conservation institutions. These training programmes started from year 2008 including three series of advanced course in statistical analysis introducing ecological analysis using R, designing experimental study, and scientific communication. Participants comprised of postgraduates and lecturers from Institute for Tropical Biology & Conservation UMS, research officers from Sabah Parks, Sabah Foundation and Sabah Forestry Department.

The last series of the training course was conducted at two stages; the first part was held at Danum Valley Conservation Area from 15th to 19th of March 2010, which focused on developing and validating revised research protocol including experimental design, layout, field data collection and analysis system. The second part of the training was held at ITBC UMS from March 22nd to 23rd, which emphasised on the presentation of scientific research data and the review of teaching material for the overall series of the course.