Project Update: September 2012

I have now completed 6 months of my project which commenced on 1st April 2012. In the following paragraphs, I summarise my main activities during these 6 months.

1. Field work for plant functional traits: We have so far been able to gather data on seed, wood and leaf traits for around 300 individual trees covering 80 tree species. Field work to boost this dataset is in progress. The major field component of the project has been severely delayed because, in spite of our best efforts, the local Forest Department has not yet approved of our proposal to conduct our fieldwork. Such delays are quite frequent, and we are working hard to make sure we have our permits in hand at the earliest. Fieldwork was also suspended during the southwest monsoon between July and September.

2. Laboratory work to characterise biophysical traits of leaves and wood: The laboratory work to characterise plant functional traits such as wood density, specific leaf area (SLA), leaf carbon, leaf nitrogen and other nutrients has been completed for all samples that have been collected so far. Some preliminary analyses of the data have also been completed – however the completion of the functional trait dataset (which is around 50% complete) is essential before any meaningful results can be presented.

3. Tool to rapidly measure leaf area: One outcome of the functional trait data collection has been the development, through collaboration with computer programmers, of an automated tool to estimate leaf area – which is an important, yet time-consuming, activity in characterising plant functional traits. The software is in its final stages of development and will be made freely available shortly.

4. Fieldwork for soil carbon pools and fluxes: Beginning in mid-October 2012, we will initiate fieldwork to monitor relationships between tree species composition, abiotic conditions and soil carbon storage. This will involve field observations and experiments involving leaf litter fall, decomposition, microbial activity and soil carbon.

5. Interview surveys to characterise local peoples' impact on tree species composition in forest fragments: As this survey is in many ways linked to the plant fieldwork, it too has faced unscheduled delays. This survey will be conducted alongside the upcoming field campaign described above. So far, we have had held discussions with local conservationists in order to structure the surveys and identify informants.