**MSc thesis topic**  
**Shade tree selection for coffee agroforestry systems**  

*Field locations: Nicaragua, Costa Rica or Cameroon*

**Introduction**  
The coffee plant is by nature a shade tolerant species. However, due to decades of extension services emphasizing high yields, most coffee production today takes place in mono-cropping systems under full sun, which requires purchase of high amounts of inputs. With more focus on sustainability, large coffee buyers and farmers themselves are increasingly becoming aware of agroforestry systems, where coffee is grown under shade trees that buffer weather extremes, create resilience towards climate changes and may provide farmers with tree products for own consumption and sale. The knowledge of different shade tree species and their benefits or possible disadvantages (such as influence on pests, soil humidity or yield) is still limited, making advice on agroforestry practices to farmers inadequate or even faulty.

**The thesis**  
The MSc thesis will take departure in the above context and investigate coffee farmers’ current agroforestry practices and their experiences with different shade trees. The student can develop his/her own thesis proposal, but the thesis work should include collection of data regarding farmers’ preferences for shade trees and the biophysical importance of shade trees to the coffee cultivation systems, following a methodology developed by the World Agroforestry Centre (ICRAF) and partners.

While the study will focus on coffee agroforestry systems, the student should expect to take an interdisciplinary approach and make use of e.g. producer surveys, focus group discussions, and interviews with key stakeholders. Field work of around 3 months is expected in one of the 3 possible study locations:

- Nicaragua, around Matagalpa. Spanish is required. NicaFrance is the local contact.
- Costa Rica. Spanish is required. CIRAD is the local contact.
- Cameroon. French is an advantage. CIRAD and IRAD are the local contacts.

The student must secure funds for the fieldwork her/himself, but will receive guidance on fund raising. The local contacts will be of assistance before and during the fieldwork. The results of the thesis will contribute to [www.shadetreeadvice.org](http://www.shadetreeadvice.org)

**Supervision**  
The student will be supervised by Aske S. Bosselmann, assistant professor at IFRO, and select project partners in the BREEDCAFS project ([www.breedcafs.eu](http://www.breedcafs.eu)). As such, the MSc project is a great way to expand the student’s international network. The student can identify a relevant co-supervisor if needed.

**Contact**  
Interested students should contact Aske via email: ab@ifro.ku.dk