Project Update: December 2012

Objectives and accomplished activities

Objective 1: Quantifying human disturbance in each studied plot
In order to access a disturbance value for each studied plot, from April 2012 to August 2012, 40 households near the studied plots were indentified and the household head was interviewed. The semi-structured interviews used had quantitative and qualitative questions which focused on the social traits, land use, uses of local woody plants and livestock raising. Moreover, disturbance indicators as number of houses near the plot, proximity to urban center and to roads were obtained from satellite imagery. All data sets from interviews and satellite imagery were combined to get a unique value of disturbance per plot, which will be used to test our predictions.

Objective 2: Accessing the influence of human disturbance on seed rain diversity
In June 2012, 160 seed traps were installed in 20 50 x 20 m plots. The seed rain is being monitored every month. Until now, we registered 941 seeds from 21 species. The seed traps will be visited up to June 2013.

Objective 3: Evaluate seed germination and seedling establishment of species with different life strategies in a disturbance gradient
In November 2012, we received seeds from four wood species (*Amburana cearencis, Anadenanthera colubrina, Poincianella pyramidalis* and *Myracrodruon urundeuva*) donated by the Seed Laboratory - Centro de Recuperação de Áreas Degradadas da Caatinga/UNIVASF. In December 2012, 30 seeds from each species were seeded in four subplots, which are within the 50 x 20 m plots. The germination of these seeds will be monitored from January 2013 to April 2013 (rainy season), and the establishment in the next rainy season.

Objective 4: Accessing changes in diversity of adult and sapling woody flora under human disturbance pressure
The census of adult and sapling plants was planned to January 2013, all the sampling plots were already demarcated on field and activities will begin next month.

Future work
Activities from objectives 2, 3 and 4 will continue in the next months as planned, to get the complete dataset and analyses necessary to answer main study questions.