

PhD position in optimization of sustainable forest management in Costa Rica



We are looking for a motivated PhD candidate (65 % TV-L E13) for our innovative and applied research project “Development of a management system for mixed tropical reforestation systems with native tree species”.

About the project:

Forests in Central America have been largely deforested during the past decades. This has resulted in large areas of degraded land, which are nowadays often reforested by private investment companies. Most of these companies decide to plant exotic tree species in monocultures, since these are known to provide high economic revenues. An ecological alternative could be the use of native tree species in mixed forest systems. Yet, there is a lack of scientific knowledge about economic implications of ecological plantations (e.g. enhanced biodiversity) and the ways to convert existing monocultures to sustainable plantations. Therefore, this research project will employ two PhD students to work on this topic. One student will develop forest growth models for mixed plantations with native tree species in Costa Rica and the other one (this position) will develop a model for optimizing forest management. The optimization model should combine multiple management objectives, including economic and ecologic (e.g. carbon sequestration, biodiversity) objectives. The project will be in close cooperation with the afforestation company *FuturoVerde*, which is our local partner in Costa Rica. The project is funded by the German Federal Environmental Foundation (*Deutsche Bundesstiftung Umwelt - DBU*).

Requirements:

- A MSc-degree or equivalent (a degree with a standard period of study of at least 10 semesters) in Forestry, Economics, Environmental Sciences or a related relevant discipline
- A strong interest in tropical forest management, economic optimization and provisioning of multiple ecosystem services
- Highly developed English communication skills (written, verbal)
- The ability to work independently and as part of an international team
- The willingness to work in Germany, Freiburg and to travel to Costa Rica
- Knowledge of a programming language (e.g. R, Python)
- Preferred: Spanish communication skills

What we offer:

We offer a PhD position in an interdisciplinary research group at the University of Freiburg, Germany. The salary is TV-L E13 65% for a period 36 months, starting on 1.2.2019. Besides a strong focus on multifunctional forest management, the chair *Forestry Economics and Forest Planning* works on topics related to risk and uncertainty in forest management as well as adaptation of forest management to a changing climate (https://www.ife.uni-freiburg.de/about/kurzportrait-des-ife-en?set_language=en).

Founded in 1457, the University of Freiburg is one of the oldest German universities. Freiburg is a vibrant student city at the foot of the Black Forest in close vicinity to France and Switzerland, with a rich cultural and academic life and excellent recreational opportunities.

The University of Freiburg is an equal opportunity employer and encourages women to apply.

For international candidates, the University of Freiburg offers support through the Welcome Service (http://www.welcomecenter.uni-freiburg.de/front-page-en?set_language=en).

Your application:

Please send your application (motivation letter, CV, master thesis, relevant certificates) via mail or email (as single pdf file) until 13.01.2019:

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