From February 15, 2020 onwards, the **Crop Science Group** at the University of Bonn seeks to employ, for **up to 3 years (max.).**

1 Doctoral Student (65%) (TV-L 13)

The successful candidate will be involved in the BMBF-funded research project "Digital Agricultural Knowledge and Information System (DAKIS)". DAKIS contributes to the vision for spatially and functionally diversified agricultural systems. These systems will be small-scale, and landscape-specific, as well as tailored to the demands of society by effectively integrating requirements for agricultural goods and services into farm planning. The Crop Science group at the University of Bonn is contributing to DAKIS with process-based dynamic models and by supporting field data collection using novel and established remote and surface observation techniques.

Specifically, the research of the PhD student will focus on "Modeling soil erosion by wind and water in agro-forestry systems". The experimental site is located in Brandenburg, Germany. The main tasks of the successful candidate will be to 1) conduct ground- and aircraft-based monitoring of the test site 2) to develop a model for the simulation of soil erosion by wind and water using the modeling framework of SIMPLACE (www.simplace.net).

Your tasks:
- Regular ground and aircraft-based monitoring of the DAKIS test sites and field data collection
- Model soil erosion by developing suitable modules within the SIMPLACE framework
- Publishing results in peer reviewed journals

Your profile:
- Master degree in agriculture, forestry, soil science or related disciplines, preferably with a background in agro-forestry/crop production, biodiversity, remote sensing and/or good expertise in using simulation models
- Experiences and interest in developing process-based, numerical models especially related to soil erosion and in object-oriented computer programming are a strong plus
- Expertise in R, XML and Python scripting is desirable
- An interest in interdisciplinary and collaborative research

We offer:
- Participation in the multi-disciplinary international research hub of "Digital Agricultural Knowledge and Information System (DAKIS)
- An open, stimulating and interdisciplinary work environment where good ideas are encouraged and supported
- The opportunity of conducting research towards a PhD and of receiving the support necessary to do successfully
- Enrolment in the Theodor Brinkmann Graduate School of the Agricultural Faculty
- 65% TVL E13 on the salary scale

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university and aims to increase the number of women employed in areas where women are under-represented and to promote their careers. To that end, it urges women with relevant qualifications to apply. Applications will be handled in accordance with the *Landesgleichstellungsgesetz* (State Equality Act).

Applications from suitable candidates with a certified disability or equivalent status are particularly welcome. Female candidates are encouraged to submit their applications. Applicants please submit (1) A letter of motivation including your specific research interest (max. 1 page), (2) a curriculum vitae including a list of publications, (3) a copy of your Master degree, (4) the names and contact details of two referees (position, professional address and e-mail) in a single pdf file should be sent till **15-12-2019** to Dr. Muhammad Habib-ur-Rahman (Email: mhabibur@uni-bonn.de). For further information concerning our research group you can visit our website at http://www.lap.uni-bonn.de/home?set_language=en.