

SDG^{nexus} Network Doctoral Scholarships at the Universidad Nacional de Colombia

The **SDG^{nexus} Network**, based at the Center for International Development and Environmental Research (Zentrum für internationale Entwicklungs- und Umweltforschung, ZEU), awards, **for three years starting August 1st, 2021**,

Two Ph.D. Scholarships at the Universidad Nacional de Colombia in the field of Geoinformatics for Investigating Sustainable Development Goal Interactions

About the SDG^{nexus} Network

The SDG^{nexus} Network, consisting of partners from Colombia, Ecuador, Germany, Kyrgyzstan, Tajikistan, and Uzbekistan, provides a common research framework related to the Sustainable Development Goals (SDGs) of the United Nations and aims to analyze synergies and trade-offs among individual SDGs (SDG nexus analysis). The network intends to prepare the next generation of scientists by implementing a variety of teaching programs and training activities, with particular attention to the needs of junior researchers. The SDG^{nexus} Network particularly investigates interrelations among single SDGs within the following five focal research areas: Food systems, Water, Urban & rural areas, Natural resources, SDG monitoring.

Please find further information on the research areas at

<https://www.uni-giessen.de/fbz/zentren/zeu/sdgnexus/research/research-areas>

Ph.D. research description

Based at Universidad Nacional de Colombia (UNAL) – Sede Bogotá –, you will conduct research in any field in geoinformatics, such as spatio-temporal modeling, spatial intelligence, geosimulation, environmental remote sensing, geospatial analytics, deep learning, machine learning, or spatial big data analysis, applied to one or more of the SDG^{nexus} Network research areas defined above. Although the Ph.D. topic of interest is suggested by each applicant, such a topic should be strongly linked to the use of geospatial data for monitoring progress in achieving the SDGs.

What we offer

- A full-time scholarship (EUR 1,200 / month plus health insurance) for three years, which allows you to write your doctoral dissertation. An extension is pending on the availability of funding.
- A fully equipped working place at the Universidad Nacional de Colombia
- A research network with partners from Germany, Latin America, and Central Asia that grant you a close collaboration with ongoing research projects.
- Access to an advanced training program that allows you to strengthen your professional as well as research skills.
- Comprehensive guidance and supervision.
- Short-term research stays at network partner institutions can be supported with travel funds.

What we expect / Applications Requirements

- A Bachelor of Science (B.Sc.) degree in a topic related to SDGs and a completed M.Sc. degree with exceptionally good results in any of the geoinformatics disciplines. The applicant's last academic degree should not be more than six years ago; if the applicant already started with his/her Ph.D. project, it should have started not more than one year ago
- Advanced communication skills in spoken and written English and excellent scientific writing skills
- Applicants must have a citizenship of an ODA recipient country
- At the potential start of the scholarship, applicants should not have been residing in Germany or any other country which is not on the [DAC list](#) for more than 15 months. This will not be applicable if the applicants are already enrolled at a university and, due to this, have already resided in these countries for longer
- Selected candidates are obliged to apply for admission to enroll as a doctoral student at the Universidad Nacional de Colombia in the second semester of 2021
- Applicants are familiar with the SDG framework and with the methods, indicators, metrics for monitoring progress and solving trade-offs between them.
- Experience in performing spatial analyses
- Technical skills in programming/scripting
- The research proposal must relate to one of the research areas and must be linked to one or several regions of the SDG^{nexus} Network defined above.

Application process

Please send your application, preferably via e-mail to the Selection Committee (Björn Weeser: sdgnexus@zeu.jlug.de) stating the **reference code UNAL/Ph.D. until 30th April 2021**. Applications must be submitted as a **single PDF file**. Only complete applications, with documents in the order listed below, will be accepted:

- Cover letter stating your motivation to apply for the scholarship
- Curriculum Vitae
- Preliminary Ph.D. project proposal (about 1500 words, including problem statement, hypotheses, methodology, expected results, and how the work contributes to any or several of the SDG^{nexus} Network research areas and regions)
- Academic Certificates
- Two recent letters of recommendation from professors, course instructors, or other persons qualified to assess your academic achievements
- List of publications (optional)

Note that applicants should not have been (previously) awarded any scholarship, fellowship, or economic stipend to conduct her/his Ph.D. study at Universidad Nacional de Colombia or elsewhere.

The SDG^{nexus} Network is seeking a larger percentage of women in academia; therefore, qualified female applicants are especially encouraged to apply. For further information on the SDG^{nexus} Network see <http://www.sdgnexus.net>
Please be aware that we will only contact successful applicants.