Terms of Reference

Call for Individual Consultant to develop a course module on 'Climate data: Climate Models, Remote Sensing and Observations', for graduate degree programs in Pakistan

About Us

The University of Kassel is a modern and growing University with around 23,000 enrolled students. The university's wide range of expertise covers subjects in the natural, applied, cultural and social sciences. We aspire to contribute to the sustainable development of society through relevant and future-oriented research as well as through modern education of graduates and knowledge transfer to within and beyond our region.

Background

Pakistan exemplifies a high vulnerability to climate-related impacts but a relatively low integration of climate change into curricula in higher education institutions. Consequently, the country demonstrates limited engagement and awareness of students on climate change issues, particularly from an interdisciplinary perspective, and inadequate scope and scale of climate change research in general. To this end, the project "Mainstreaming climate change into higher education and research in Pakistan" seeks to address this gap by developing course modules and trainings on topics related to climate change, which are important in the context of Pakistan, but show large gaps in terms of university curricula. Furthermore, the project seeks to train potential teachers on how to teach these courses and to ultimately build a strong network at higher education level in Pakistan as well as with German counterparts in academia and research. The project is implemented with support from the Potsdam Institute for Climate Impact Research (PIK) and funded by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Duties and Responsibilities

Objectives of the assignment:

The purpose of this assignment is to develop a graduate level course on the topic 'Climate data: Climate Models, Remote Sensing and Observations', with particular reference to Pakistan's local context. The consultant is expected to provide a complete course module outlining the course contents, learning objectives, session plan, teaching material, class exercises etc. The content of the course should be up to date with the latest scientific models, tools and data sets. The course needs to include a reasonable balance between theory, methods and practice and should be aligned with the requirements of the Higher Education Commission of Pakistan. All material should be prepared in the English language.

Scope of work:

The consultant would be responsible for carrying out the following tasks:

- Develop course materials for 28 lecture sessions (90 minutes each) including but not limited to:
    - Lecture slides including interactive material for students.
    - A reading list for each lecture including relevant sources.
    - Additional relevant resources like videos, websites, online tools, etc.
    - 2 - 3 quizzes to test students' knowledge.
    - Individual tasks and/or group work activities.
    - Example assignments/home tasks.
- Develop a course guideline for potential teachers, covering the following topics:
    - Comprehensive outline of the course, overarching goals and learning outcomes.
    - A list of diversified learning materials such as textbooks, research papers, reports, and multimedia for different topics.
    - Additional reading resources for teachers.
    - Assessment criteria of the course along with a sample exam paper.
    - Guidelines on how to contextualize the course content to the specific needs, challenges, and policy landscape of Pakistan.
- Engage with Pakistani academics and researchers to gather feedback on the course content, within the context of Pakistan.
- Facilitate a 2 - 3 hours virtual session to present the developed course module to Pakistani academics and researchers.
- Hold monthly meetings with project team to discuss the updates/needs/challenges.

Timeline and Reporting:

The consultant will be engaged under the individual contract, largely delivery-based with a specific delivery schedule, covering the 8 months period from September 15, 2023 to May 31, 2024. This contract will be offered against a competitive compensation of 8,500 Euros (Gross), which will be paid in two phases (50% after the submission of the first deliverable and 50% at the completion of the consultancy assignment, after the content has been approved by a team of experts). He/she will work closely with the project team and report directly to the Project Lead. The consultancy shall be home-based and would deliver the following:

Deliverables	**Due Dates***
Course concept, indicating the different topics which will be covered in each lecture session	September 15, 2023
Develop course materials for lecture sessions 1-10	November 30, 2023
Revise course materials for the first sessions based on feedback	December 15, 2023
Develop course materials for sessions 11-28	February 20, 2024
Revise course materials for all sessions, if needed	March 15, 2024
Virtually present course concept and materials to potential teachers in Pakistan (2-3 hours)	March 30, 2024
Revise course concept and materials, based on feedback from potential teachers	March to April 2024

* The due dates are subject to change based on concurrent project activities.

Required experience and skills

- A postgraduate degree or equivalent qualification in Environmental Sciences, Agricultural Sciences, Geography, Environmental Engineering, Climate Science, or other related disciplines.
- At least 3 years of relevant professional experience in climate policy, environmental governance, or related fields.
- Strong knowledge of theoretical and practical aspects of climate models, remote sensing tools, data handling, either in the Pakistani context or a willingness to apply knowledge to the Pakistani context.
- Interest to collaborate with Pakistani stakeholders from academia and research in co-developing the course module.
- Excellent analytical, writing and oral communication skills in English.
- Knowledge and experience in developing and teaching course modules at higher education level will be a plus.

How to Apply

The consultancy application must consist of the following two attachments:

- A cover letter (max. 2 pages) outlining an understanding of the scope and activities, motivation to undertake it and demonstrating a fit for the assignment.
- An updated CV demonstrating relevant previous academic and professional experience.

Please send your application until **August, 27th, 2023** to Samavia Batool (samavia.batool@uni-kassel.de) and Dr. Rike Becker (rike.becker@uni-kassel.de).