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Strengthening Capacity of Higher Engineering Education for Sustainable Buildings | (HEESeB)

A partnership between Austria and Bhutan

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COORDINATING INSTITUTION:

Jigme Namgyel Engineering College (JNEC)

PARTNER INSTITUTION:

University of Innsbruck (UIBK)

PARTNER COUNTRY:

Bhutan

PROJECT DURATION:

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Bhutan is known for having over 71 per cent of its territory under forest cover and the country is popular for being carbon negative. To date, the country has conserved and sustainably managed these natural resources. However, a study conducted by the World Bank found that the "country's forestry sector constitutes an important but underutilized sector of the economy with a contribution of only 2 percent to GDP per year". It also emphasised that the country's forest sector has the potential to be more productive by applying the principles of sustainable forest management to Bhutan's production forests and that modernizing the sector could significantly increase the productivity and also improve ecological resilience. The report also states that sustainable forest management could increase employment opportunities and create forest-based enterprises.

The project Strengthening Capacity of Higher Engineering Education for Sustainable Buildings (HEESeB) aims to offer a certificate programme in Timber Engineering for Energy Efficient Buildings (TEEEB). The graduates of the programme will have efficient knowledge and skills in timber engineering and will be able to sustainably manage timber as a natural resource. The project will be beneficial for hundreds of Bhutanese students and engineers.

Three short term trainings on timber engineering, building simulation and HVAC and on gender, equity and diversity sensitive science, technology, engineering and mathematics (STEM) teaching will be conducted at UIBK and JNEC:

- a 10-day Training of Trainers (ToT) on timber engineering at UBIK,
- 2 an 8-day ToT on building simulation and HVAC at JNEC, and
- a 5-day ToT on gender, equity and diversity sensitive science, technology, engineering and mathematics (STEM) teaching at JNEC.

These ToTs will enhance the teaching capacity of at least 50 teachers, who will impart the acquired knowledge and skills to the students of JNEC.

Thus, this project will have multifaceted benefits.





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