



Implemented by:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

In cooperation with



Higher Education

# BANGLADESH-GERMAN UNIVERSITY COOPERATION FOR GREENING TEXTILE ENGINEERING STUDY PROGRAMMES AT BACHELOR'S AND MASTER'S LEVEL



## IMPLEMENTATION

After having started to work together as members of a German funded Bangladesh-German university network between 2017 and 2020, the Bangladesh University of Textiles (BUTEX) and the German Hof University of Applied Sciences decided to continue their cooperation as part of the bilateral project "Higher Education and Leadership Development for Sustainable Textiles in Bangladesh" (HELD), implemented by GIZ for the period 2021-24.

To cooperate in the most efficient way, two separate agreements based on two very well aligned proposals were signed by GIZ and each of the two institutions respectively. Based on those agreements, after having jointly analysed the Bachelor's curriculum "Textile Engineering" including the various specializations existing at BUTEX and taken into account the needs of the industry, the two partner universities revised various course modules and introduced some new ones – all of this with a focus on social and environmental sustainability topics. To equip the faculties at BUTEX and its affiliated colleges with the necessary technical and pedagogical skills, several training sessions facilitated by local and international experts as well as two study tours to Europe were implemented. Moreover, BUTEX students benefitted from additional courses on research and data collection. Finally, the two universities did not stop at the Bachelor's level but ventured even further into developing a new sustainable Master's programme at BUTEX and formalized their cooperation efforts even beyond the HELD project. Their longstanding cooperation shows how a university network can work in the textile sector and can serve as an example for networks in other sectors, too!

*Closely aligned with the bilateral HELD project activities in the field of higher education, additional activities have been financed by the German private sector to make the overall impact even more sustainable: Cooperation partners are the workwear company Engelbert Strauss financing the Chair for Sustainability and Textile Innovation (CSTI) at Ahsanullah University of Science and Technology (AUST) and the textile retailer KiK providing scholarships to students at BUTEX and Begum Rokeya University Rangpur (BRUR).*

*Furthermore, there are important interfaces with the regional project Digital Skills to Succeed in Asia (DS2S) that is being implemented by GIZ at universities in Bangladesh, India and Vietnam as well as the InnoLead@Work project that has been implemented under the HELD project in cooperation with Technical University Dresden (see HELD ON THE JOB TRAINING).*





## KEY RESULTS

**Greening of the B.Sc. Textile Engineering curriculum at BUTEX:** Introduction to Environmental Engineering, Global Climate Change, Man-made Textile Fibres, Wet Processing I+II, Industrial Occupational Hygiene and Safety, Environmental Sustainability and Circularity in the Textile Supply Chain (total of 7 revised/new modules)

**Student engagement:** More than 800 BUTEX and college students have been benefitting from the new and revised modules

**Teacher training:** Around 100 faculties of both BUTEX and the Textile Colleges have been trained on sustainability topics as well as pedagogy

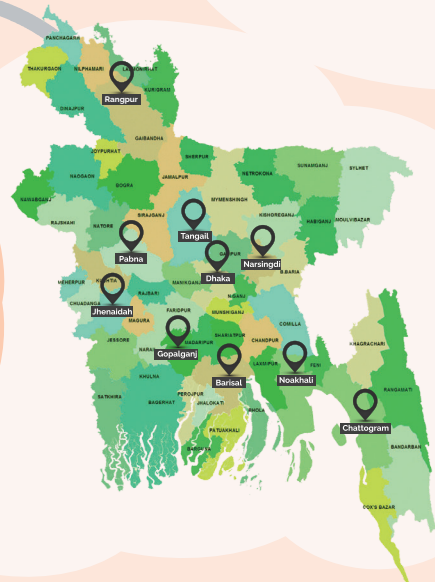
**Innovation:** New Master's programme "Sustainability in Textiles" developed to start at BUTEX in early 2025

**Research focus:** 2 batches of a new certificate course on "Research Methodology" were implemented with a total of around 70 students benefitting, one more batch is planned here as well as a new course "Practical Data Analysis"

**Extra leverage:** 9 BUTEX-affiliated Textile Colleges all over the country take over the new curriculum in the long term

*Around 100 students from different universities attended the certificate courses on Circular Fashion and Women of Fashion at AUST, the latter including a writing workshop and following book publication showcasing female role models in the Bangladeshi fashion industry.*

*KiK financed 8 long-term scholarships for BRUR and 8 long-term as well as 29 short-term scholarships for BUTEX Bachelor students, the latter ones also received German courses in cooperation with the Goethe Center Dhaka.*



## TIMEFRAME

### 2017-2020

- BUTEX and Hof University have been cooperating under the HELD forerunner project HEST (German Bangladesh Higher Education Network for Sustainable Textiles)

### 2021

- Grant agreement between GIZ HELD and Hof University signed

### 2022

- Financing agreement between GIZ HELD and BUTEX signed
- Opening ceremony of the BUTEX-Hof Cooperation
- Online needs assessment featuring industry representatives

### 2023

- Joint policy level workshop in Bangladesh
- Sustainability and pedagogy trainings for BUTEX and college faculties
- BUTEX delegates visit Hof University including the Textile Campus at Münchberg
- Joint visit of the International Textile Machinery Association (ITMA) trade fair in Milan, Italy

### 2024

- Signing of the MoU in Hof featuring representatives from both governments: political dialogue between representatives of the Secondary and Higher Education Division (SHED) of the Ministry of Education, the University Grants Commission (UGC) and the German Federal Ministry for Economic Cooperation and Development (BMZ)
- Joint visit of Hof and BUTEX faculties at Adidas, BASF as well as the TechTextil trade fair in Frankfurt
- International conference at BUTEX on textile science and engineering with special focus on advanced and sustainable technologies and active participation of Hof
- Faculty trainings on Wastewater Management, ESG (Environmental, Social and Governance criteria) as well as Life Cycle Analysis
- Finalization of the Master's curriculum

*MoU signing between the HELD project and the German textile retailer KiK ("KiK makes the Difference" project)*

*MoU on "Promoting a Just Transition of the Textile Economy" between the HELD project and CSTI at AUST in Dresden (UNO-FLORES Textile Symposium) to develop micro-credentials*

*Development and teaching of micro-credentials on sustainability at AUST in cooperation with a designer and freelance consultant from Germany*

*Development of another micro-credential on Digital Fashion at AUST in cooperation with the regional project DS2S*

## LESSONS LEARNT

- **Collaborative effort:** BUTEX and Hof university have been complementing each other in terms of expertise and different perspectives deepening the understanding of their respective economic and social environments
- **Online pioneering:** The BUTEX-affiliated colleges all over Bangladesh have been included smoothly by means of online teaching
- **Multicultural team:** The trainings for BUTEX faculties were conducted by experts from Bangladesh, India, Germany and France
- **Truly sustainable cooperation:** BUTEX and Hof University signed a Memorandum of Understanding (MoU) to cooperate beyond the HELD project regarding teaching, research and the exchange of faculty and students with a focus on Textile Studies and Engineering

*Classical development cooperation activities can go hand in hand with private sector engagement: The CSTI at AUST was even showcased as a prime example of sustainable development cooperation at the UN SDG Summit in New York 2023!*

## WAY FORWARD

BUTEX and Hof University have agreed on the following areas of future cooperation independent from GIZ:

- receive undergraduate and graduate students from each other's institutions for periods of study and/or research
- designate coordinators to oversee and facilitate the implementation and to act as principal contacts for individual and group activities and to plan and coordinate all activities within their institutions as well as with the partner institution
- exchange information about the faculty, facilities, research, publications, library materials and educational resources of both institutions
- meet periodically to review and evaluate past activities and to work out new ideas for future cooperative agreements

*Two KiK scholarships are reserved for future students of the new Master's programme at BUTEX!*

## QUOTES

The newly developed MSc Program on textile sustainability under HELD opens up vivid opportunities for BUTEX graduates worldwide. We believe in sustainable development through quality education.

**HELD Project Lead Officer at BUTEX**

This HELD project has provided valuable impetus for the sustainable textiles Master's program at Hof University of Applied Sciences and has significantly supported efforts to spread the concept of sustainability in the textile industry in Bangladesh and Germany.

**HELD Project Lead Officer at Hof University**

The project HELD at BUTEX has opened up opportunities to explore German textile education, industry, and how sustainability can be ingrained in the curriculum on both undergraduate and Master's level.

**Assistant Professor, BUTEX**

The HELD-BUTEX project's research methodology course was instrumental in deepening my grasp of research principles, equipping me to approach my ideas with thorough and meaningful research.

**Student, BUTEX**



<b>Project</b>	Higher Education and Leadership Development for Sustainable Textiles in Bangladesh (HELD)
<b>Commissioned by</b>	German Federal Ministry for Economic Cooperation and Development (BMZ)
<b>Duration</b>	01/2021 – 12/2024
<b>Goal</b>	To strengthen the application-oriented competencies of future specialists and managers of the textile industry in sustainable corporate management.
<b>Partner Ministry</b>	Ministry of Education (MoE) Government of Bangladesh
<b>Implementing agency</b>	University Gants Commission (UGC)

**Published by:**  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:  
Bonn and Eschborn, Germany

**GIZ Bangladesh**  
PO Box 6091, Gulshan 1  
Dhaka 1212, Bangladesh  
T +880 9 666 701 000  
E [giz-bangladesh@giz.de](mailto:giz-bangladesh@giz.de)  
I [www.giz.de/en](http://www.giz.de/en)

**As at**  
Dhaka 2024

**Printed by**  
FLUX, Dhaka

**Design**  
Fahud Khan, Dhaka

**Photo Credit**  
@ GIZ BD

**Author:**  
Laura Schnieders

**Responsible:**  
Dr. Christian Bochmann

On behalf of  
German Federal Ministry for Economic Cooperation and  
Development (BMZ)