

Higher Education and Science meet Practice organized by the by the Service Point Higher Education for Development (GIZ)

Previous events of the Service Point:

1. Green Energy in Higher Education (03.03.2022)
2. Food Security and Sustainable Agriculture (04.10.2021)
3. One Health (29.07.2020)

1. Green Energy in Higher Education, 3rd March 2022, 14:00 – 16:30h (CEST)

Moderation: Dr. Shaban Mayanja

Keynote speaker: Dr. Sören Dengg (Head of Division 422: Energy Hydrogen; Raw Materials; Infrastructure, Federal Ministry for Economic Cooperation and Development)

Panelists: Prof. Dr. Dirk Herbert Dahlhaus (Coordinator, International Master Program REMENA, University of Kassel), Prof. Dr. Peter Heck (Professor for Environmental Economy, Environmental Campus Birkenfeld – Trier University of Applied Sciences), Christine Majowski (Project Manager & Advisor, Sustainable Finance, GIZ), Dr. Lucy Ombaka (AvH Alumna, Technical University of Kenya)

Moderators for Breakout-Sessions: Michelle Zombory, Ricardo Costa Pereira, Lilly Seidler, Lukas Böttcher

Knowledge transfer and networking: Interactive panel session

In his keynote, the Head of Division 422: Energy Hydrogen, Raw Materials and Infrastructure at the German Federal Ministry for Economic Cooperation and Development, Dr. Sören Dengg highlighted the important role played by the ministry in promoting higher education and applied research in Renewable Energies. He further pointed out that the Green Energy transition requires **increasing the number of skilled professionals**. This can be achieved by promoting **practice-orientated** university education and research. In this regard, the **German Federal Ministry for Economic Cooperation and Development (BMZ)** funds university partnerships in the field of Renewable Energies through the German Academic Service (DAAD) with a focus on the Global South.

Higher education institutions should provide students with **practice-orientated skills and training**. Besides training students to become renewable energy experts, universities should serve as **role models for green energy best practices**. Students should be encouraged to analyze the systems they are surrounded by, develop appropriate business plans, and point out ecologically and economically unsustainable policies to decision-makers.

International degree programs offer an opportunity for **training young professionals** from different academic and professional backgrounds. **International collaboration between universities** in teaching fosters the **harmonization of degrees**.

Thus, it facilitates student exchange and ultimately improves the perspectives of students in their home countries. For international collaboration to be successful, it is important that the needs of the different stakeholders are addressed.

Involving private and public sector actors in academia facilitates **knowledge transfer** from practice into higher education and vice versa. Through collaboration, universities learn about recent developments and trends in the sector, identify research gaps and ensure graduates are supplied with the **skills and qualifications required by the relevant industries**. Meanwhile, young talents acquire first-hand information about **employment opportunities**.

Incorporating courses on Green Energy in higher education **curricula** can have a significant positive impact on the **social and economic development** of local communities. By raising awareness for the importance of sustainable energy practices in society, **business activities** in the field of Green Energy are fostered. Through tailor-made **learning modules**, industries are supplied with qualified experts and future leaders. On a university level, research activities on sustainable energy and energy efficiency are enhanced, and higher education institutions can build strong and useful links with industries in the field.

Breakout Sessions: Key take-aways

Rural electrification requires the development of renewable energy infrastructure and community entrepreneurship to ensure affordable small-scale electrification. This can be achieved through *Living Labs*. These are in effect decentralized, renewable energy mini-grids in rural communities in the Global South and present a unique opportunity to link research and teaching to “real-life” and practice. **Continuous engagement with the local communities** and **strong partnerships** are essential for sustainable development, e.g. electrification agencies, governmental institutions, industry partners, NGOs, etc.

A holistic approach in fostering Green Energy modules in higher education involving **blended and distance learning** has significant potential for the qualification of teachers for online teaching. Collaborations with universities should entail knowledge hubs consisting of interactive platforms for students, teachers, and experts as well as webinars on relevant Green Transition topics.

Capacity building in Green Energy can be enhanced by expanding **practice-orientated training offers** in the field of renewable energies and energy efficiency at the interface of vocational training and university education. The aim is to strengthen **entrepreneurial competences** of students through the development of **incubators** at universities and support inter-university **competitions** on business ideas in the field of sustainable energy.

Climate protection projects in the Global South address climate change and contribute to sustainable development. Carried out by international and local students in cooperation with local communities, they **empower the youth** and provide perspectives to local communities.

Conclusion

The event highlighted the importance of bringing together relevant actors from higher education and practice in paving the way for a **green transition** with a focus on sustainable capacity building in renewable energies.

2. Food Security and Sustainable Agriculture, 4th October 2021, 14:00 – 16:30h (CEST)

Moderation: Dr. Shaban Mayanja and Evelien Blom

Panelists: Assoc. Prof. Sintayehu Yigrem Mersha (DAAD CLIFOOD, Hawassa University, Ethiopia,) Prof. Elmar Kulke (Humboldt University, Berlin), Dr. Andrea Fadani (Executive Director, fiat panis Foundation), Prof. Olanike Deji, AvH-Fellow, (Obafemi Awolowo University, Nigeria), Jacques Rene Nyembe, GIZ Policy Advisor (G530: Scaling Digital Agriculture Innovations through Start-ups)

Moderators for Breakout Sessions: Deborah Badombena-Wanta, Prof. Sola Adesola Ajayi, Prof. Ernest Ekow Abano, Williams Anteyi

Introduction and input by BMZ and GIZ

Food security is a fundamental **human right**. Global climate, health and the eradication of hunger must be at the forefront to ensure food security and sustainable agriculture for all.

We must simultaneously **conserve national resources, increase sustainability** in food production and consumption, and **enhance nutrition** to end hunger, poverty and inequality. Therefore, the Consultative Group on International Agricultural Research CGIAR has identified new impact goals: nutrition, health and food security; poverty reduction, livelihoods and jobs; gender equality, youth and social inclusion; climate adaptation and mitigation; and environmental health and biodiversity. This is in line with a global strategic shift from merely increasing production to a **system-wide, impact-orientated approach to food security and sustainable agriculture**.

To ensure healthy diets for all, food sources need to be diversified, indigenous crops saved, and the increasing consumption of processed foods significantly reduced. Platforms such as the recent UN Food Systems Summit 2021 remind us that these issues cannot be solved in isolation but require a **multi-sectoral and multi-stakeholder approach**. To combat hunger, innovative ideas, practices and platforms are essential. In particular, the transfer of knowledge through **participatory networks** can be a driver for positive change.

Knowledge transfer and networking: Interactive panel session

Climate change has **the greatest impact** on developing countries where many farmers rely on traditional agricultural methods and are therefore less resilient. Food shortages can have disastrous and destabilizing effects on individuals, communities, countries and indeed, on the entire world. Food aid, which is prevalent in many fragile contexts can save lives but cannot be a long-term sustainable solution. Investing in **capacity building and innovative solutions** is a more sustainable approach than relying on emergency food provisions. In addition, it is critical to create gender equitable solutions and to **empower women along the entire food chain**. Women are a significant workforce in agriculture, especially in rural communities but have so far been neglected. Gender inequality not only halts progress, but also exacerbates food insecurity. **Strong partnerships** between stakeholders are vital in driving innovative, workable and context-sensitive solutions, such as improving food security of urban people and reducing post-harvest losses.

Higher Education institutions are important actors in **linking development and innovative research** as they produce the necessary technology and data to improve production and livelihoods. Universities are the starting point of innovation, but the end goal should be to create market-deliverable ideas and products. Start-ups, policy initiatives and projects must have **access to expertise, data and funding** to be able to scale-up and help as many people as possible. Not all solutions will be cross-contextually applicable. However, through the combination of experiences and knowledge, progress can be made.

The use of **technology**, such as Artificial Intelligence, can offer many tailor-made solutions, but needs to be researched further and implemented with the needs and abilities of end-users in mind. Especially the **cultural and gender implications of technology** in agriculture must be explored further.

Global food and agricultural challenges require a range of actors to come together to **share knowledge, best practices and findings**. Workshops are a particularly effective tool for promoting cooperation and bringing together different stakeholders, such as scientists, business experts and policymakers. The role of agricultural research should always be to serve as a public good translatable into evidence-based, innovative, and marketable solutions for farmers, policymakers and entrepreneurs.

Results should be presented to the public in a comprehensive, practice-orientated and user-friendly manner. Farmers require **easy access to understandable information** about macro and micro dynamics to make informed decisions to enable them to prepare optimally for droughts, heavy rainfall or other natural disasters and thus becoming more **resilient** to increasing climate changes.

Conclusion

The focus of the webinar was to provide **a forum for exchange and cooperation** between European and African universities and practitioners in the area of the Food Security and Sustainable Agriculture.

The webinar was able to create synergies by providing a platform for participants to introduce various programs in Higher Education and BMZ projects. In the course of the plenary discussion and breakout sessions participants **were able to engage, share ideas and establish networks for future collaboration**

3. One Health, 29th July 2020, 14:00 - 17:00 Uhr (CEST)

Moderation: Dr. Shaban Mayanja, Barbara Metzler

Panelists: Prof. Dr. Katja Radon (One Health-DAAD TARGET Network/CIH LMU), Dr. Irene Naigaga (AFROHUN), Prof. Dr. María Teresa Solís-Soto (Universidad de O'Higgins, Rancagua; One Health Knowledge Café Bolivia), Prof. Dr. Francine Ntoumi (Congolese Foundation for Medical Research), Prof. Dr. Thirumalaisamy P. Velavan (PACE-UP)

Moderators for Breakout-Sessions: Timothy Wesonga & PD Dr. Olaf Horstlick, Dr. Bella Elisabeth Monse, Dr. Rachel Vicente, Dr. Irene Lukassowitz, Kathrin Norda

Knowledge transfer and networking: Interactive panel session

Universities are important **multipliers**. Joint research activities with cross-sectoral partners (international partners, international development organizations, NGOs, third and private sector institutions) clearly **improve potential for networking** with international partners. In terms of sustainability the **collaborations across universities appear to be a challenge**. Especially joint research programs in cooperation with partners such as the GIZ or NGOs would improve outreach into practice. Mentorships at universities can equip PhD and post-doc students with more practice-related capacity building.

Optimizing scarce resources as well as pushing **transnational and interdisciplinary work** would create more opportunities for institutions that operate at both local and international level. Strong collaborations with local, regional and continental initiatives are also strongly emphasized for successful and sustainable knowledge transfer. In order to enhance sustainable collaborations, the collaboration efforts of **local initiatives** need to be consolidated with entities that build capacities.

Capacity is another important factor when building successful international partnerships. To turn cooperation into collaboration and eventually into capacity, it needs expanding of existing knowledge through continuous education training, as well as a more critical mass of well-informed individuals, and research capacities. Therefore, **individual capacity will lead to institutional capacity**, which then brings in systemic organizational capacities. Equitable partnerships are always necessary for successful sustainable outcomes.

Breakout Sessions: Outcomes and Opportunities

Further adaptations of university courses on One Health and pandemic preparedness are welcome. To improve the overall outreach and recognition of the courses, **academic certificates** or a full diploma would further widen networking opportunities. **Practical approaches** such as simulation exercises enhance students to better respond to public health situations. **Joint teaching and learning initiatives** also bundle and strengthen human resources (intercultural approaches and international collaboration).

Political environment is a crucial factor to be able to address problems such as global health challenges appropriately. A stronger **partnership between politics and academia** would also direct research projects to take a stronger focus on practical problems. Political involvement is necessary to formulate a more suitable response to global and national health challenges. Transparent and comprehensive processes at all levels improve the impact across sectors.

Collaborations with education ministries happen to be more successful when using the **“language” of the educational sector**. Education ministries should further support universities for doing research. All partners involved profit from a stronger collaboration between state institutions and universities, as project implementers can use research results to **scale up and to inform decision makers**.

Local networking is crucial to gain information on the ground and works with existing structures. Stronger collaborations with political actors and the private sector scale up the international outreach of projects to meet global challenges. Projects should also be manageable without huge resources from outside.

Conclusion

The One Health webinar brought university networks from the Global South, BMZ projects, the DAAD and the AvH together with the aim of **enhancing knowledge transfer in development cooperation**.

For more information or future participation in our event series please contact the Service Point Higher Education for Development (GIZ) via E-Mail: hse-service@giz.de