Role of Higher Education, Science and New Alliances – 2030 Agenda

Documentation
Berlin, March 20-21, 2017
# Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>3</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>4</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>8</td>
</tr>
</tbody>
</table>

## DAY 1

Opening Remarks by Roland Lindenthal  
Keynotes  
- Prof Dr Dirk Messner  
- Prof Dr Heila Lotz-Sisitka  
Thinking Labs  
- TL 1: German-Arab Master's programmes: South-North networks for joint learning and research in the development context  
- TL 2: New Partnerships for Innovation in Sustainable Development – the connection between research support and development cooperation projects  
- TL 3: Bilateral graduate schools contributing to the development of transformative research approaches  
- TL 4: Labour market oriented higher education – cooperation between higher education institutions and the private sector  
Results and Responses  
Reception at Humboldt Universität zu Berlin

## DAY 2

Keynotes  
- Prof Dr Dilvo Ristoff  
- Dr Beatrice Khamati Njenga  
Open Spaces  
- OS 1: Inclusion and equity  
- OS 2: Financing higher education  
- OS 3: Enhancing quality, governance and relevance – the role of higher education management  
- OS 4: Scholarships within the 2030 Agenda  
- OS 5: Interdisciplinarity  
- OS 6: Transforming higher education in Africa  
Wrap-up Session  
- Synthesis by Dr Ingrid Jung  
- Concluding remarks from the plenary (Fishbowl)  
Farewell
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>AvH</td>
<td>Alexander von Humboldt-Foundation</td>
</tr>
<tr>
<td>BMZ</td>
<td>German Federal Ministry for Economic Cooperation and Development</td>
</tr>
<tr>
<td>CAMES</td>
<td>Conseil Africain et Malgache pour L'enseignement Supérieur</td>
</tr>
<tr>
<td>CAPES</td>
<td>Coordenação de Aperfeiçoamento de Pessoal de Nivel Superior</td>
</tr>
<tr>
<td>CESA</td>
<td>Continental Education Strategy for Africa</td>
</tr>
<tr>
<td>DAAD</td>
<td>German Academic Exchange Service</td>
</tr>
<tr>
<td>DAG</td>
<td>Development Action Group</td>
</tr>
<tr>
<td>DIE</td>
<td>German Development Institute</td>
</tr>
<tr>
<td>HAQAA</td>
<td>Harmonisation of African Higher Education Quality Assurance and Accreditation</td>
</tr>
<tr>
<td>H-BRS</td>
<td>University of Applied Sciences Bonn-Rhein-Sieg</td>
</tr>
<tr>
<td>IBPSA</td>
<td>Interdisciplinary Bilateral Postgraduate Studies programme for Sub-Saharan Africa</td>
</tr>
<tr>
<td>IUCEA</td>
<td>Inter-University Council for East Africa</td>
</tr>
<tr>
<td>GAMP</td>
<td>German-Arab Master’s Programmes</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>GJU</td>
<td>German Jordanian University</td>
</tr>
<tr>
<td>HU</td>
<td>Humboldt Universität zu Berlin</td>
</tr>
<tr>
<td>KfW</td>
<td>KfW Development Bank</td>
</tr>
<tr>
<td>LDCs</td>
<td>Less developed countries</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MOOC</td>
<td>Massive open online course</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>NoPa</td>
<td>Novas Parcerias - New Partnerships for Innovation in Sustainable Development</td>
</tr>
<tr>
<td>ODA</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OS</td>
<td>Open Space</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SARUA</td>
<td>Southern African Regional Universities Association</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>TL</td>
<td>Thinking Lab</td>
</tr>
<tr>
<td>TVET</td>
<td>Technical Vocational Education and Training</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
</tbody>
</table>
Executive Summary

By adopting the 2030 Agenda for Sustainable Development, a paradigm shift has occurred: Different from the Millennium Development Goals (MDGs) science and higher education are both an integral part of the overall agenda. Equal access to quality higher education is explicitly mentioned as a target. The 2030 Agenda explicitly calls for a greater involvement of higher education and science in focal areas such as sustainable agriculture, climate change and infrastructure as well as in SDG 4 to “ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education including university.”

Taking advantage of this momentum, 100 experts and practitioners from 23 countries in the fields of higher education and science, development and international co-operation, and partners from politics and the private sector as well as representatives from donor organizations actively discussed key questions, challenges and the way forward.

The expert meeting was jointly organised by the Federal Ministry of Economic Cooperation and Development (BMZ), Alexander von Humboldt Foundation (AvH), German Academic Exchange Service (DAAD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and KfW Development Bank. The international meeting was the highlight of an ongoing process that spanned over one year resulting from a joint effort of German organisations towards the achievement of all SDGs through higher education and science. Almost half of the participants were actively involved in the programme of the meeting, which over one and a half days comprised multiple joint reflection and learning methods, namely keynotes, thinking labs, open spaces and a concluding fishbowl session. The participants shared their expertise and various perspectives on current approaches in strengthening higher education and science to achieve sustainable development, deeply discussed good practice examples, took the chance to set up additional open space groups spontaneously and highlighted their personal key findings and recommendations at the end of the expert meeting.
Day 1 focused on the potential of higher education and science as drivers of the necessary profound transformation to contribute to the achievement of all SDGs, in the global North and the global South. Reflections concentrated mainly on three key issues:

**Joint knowledge creation:** Shared knowledge plays a crucial role for transformation towards sustainable societies. While we have made remarkable progress in knowledge sharing in international cooperation, there is a striking deficit when it comes to joint knowledge creation. Joint knowledge creation is key to finding solutions and initiating collective action. Bringing together scientists in the global South and the global North and relevant actors from civil society and the private sector is a crucial prerequisite.

Incentive systems supporting the joint creation of knowledge for actors from industrialised, newly industrialised and developing countries are unfavourable: 1. Joint knowledge creation and learning are constrained by a scientific system orientated towards research excellence measured in citations and scientific impacts which makes joint research with less renowned institutions difficult. 2. The decisions on relevant research practices and financial implications are mainly dominated by the global North. This imbalance of power might have to be reconsidered. There is a need to develop strategies to reduce the historic and structural epistemic exclusion and marginalisation of the global South. 3. Technical and financial international cooperation are crucial for the implementation of the 2030 Agenda. However, the current trend to focus on tangible short-term results leaves little room for joint knowledge creation, which is a long-term process. Therefore, suggestions were made to include joint knowledge creation processes in projects.

In order to achieve the SDGs jointly, there was a call for reforms to allow for collective transformative actions. Industrialised countries and enterprises invest three percent of their economic power in research and development, in order to foster innovation for future viability. This approach should be considered for international cooperation too.

Initiatives such as the “Novas Parcerias (NoPa)” programme show how synergies can be brought forward by combining instruments of academic research promotion and development cooperation. This programme serves as a good practice example for a multi-stakeholder partnership and problem solving approach in international cooperation that explicitly integrates research and its transfer into practice.

**Transformative Learning and Research:** Making knowledge work is imperative for the achievement of the SDGs. High-quality university education can provide the foundation for transitioning to a sustainable society, as long as it empowers people to anticipate, analyse and find solutions to complex and pressing challenges. It should encourage curiosity about joint learning with international partners as well as promote willingness to challenge and even revise the knowledge we receive. Higher education needs to be interdisciplinary, intercultural, and to create context-relevant knowledge, in the global North and in the global South.

International settings and cross-sectoral approaches do have implications on the teaching and learning processes. Teachers, students and scientists who are dedicated to develop new ways of thinking and learning need greater flexibility in terms of inter- and transdisciplinary collaboration and possibilities of scientific recognition and reputation.

Several good teaching practices exist, such as the German-Arab Master’s Programmes (GAMP) and the Bilateral SDG Graduate School cooperation project in the field of urban development. They open up to different cross-cultural perspectives within and across societies and invite students to practice cross-sectoral thinking which is essential to address the interconnections between the 17 SDGs. South African educators have developed the concept of “T-learning” (transformative, transgressive, transdisciplinary). In this process, regional and international initiatives co-engage in research and practice to enhance sustainable development.

**Shaping strategic alliances and partnerships:** Multi-stakeholder partnerships are key to achieving the SDGs, as outlined in SDG 17. To unfold the potential of higher education and science and to make partnerships work, we need change on different levels: 1) Higher education and
science should be taken into consideration as early as the planning phase of development projects. 2) Partners and non-academics should be involved in the project design phase of higher education and research projects to ensure relevance and transfer. 3) Capacity development is key to assure strong partnerships. 4) Building reliable partnerships on equal footing requires time. Therefore, longer project cycles and more security to be able to plan for the long run are called for. Visions and strategies of partners should be taken seriously.

The success and impact of higher education institutions depend on a number of factors: the social, political and regional framework; the quality orientation of their research, teaching and management; their academic independence; and cooperation arrangements with civil society and the private sector. There is need for a strong link with the private sector in not only research but also teaching. The promotion of employability and entrepreneurship through labour market orientation in higher education requires a fundamental change in the mind-set of various stakeholders to allow for innovative approaches. Stakeholders need to develop frameworks as well as organisational structures for strategic partnerships and approaches that are adaptable to the labour market – of the present and the future. Cooperative higher education programmes, such as the German dual study approaches, are a promising means to assure strong involvement of the private sector.

Day 2 focused on the role of higher education and science in achieving SDG 4.

Unmasking a myth – quantity and inclusion are no enemies of quality: Over the last 15 years, the government of Brazil implemented a range of political strategies to enhance quality and relevance in higher education while at the same time increasing access and inclusion. Public-private partnerships led to significantly higher student enrolment rates. They primarily increased in private higher education institutions; however, the government has financed more than half of these students. Educational data combining information about students’ socio-economic profile with results from the higher education evaluation system show that the strategies have successfully led to include more students from disadvantaged backgrounds without jeopardising the quality of higher education programmes.

Experts involved in university cooperation and scholarship programmes underlined that a clear identification of the target groups are crucial for successful inclusion and diversity management strategies in higher education. Universities need to develop tailored structures in order to reach those specific target groups and to support them to do well in their studies. Digitalisation processes and tools – from information platforms to open universities – have a great potential to enrich inclusion and diversity strategies. However, universities need to take into account possible disadvantages caused by the existing digital divide.

Financing higher education: Current statistics on education enrolment rates, demographic development, costs, and government budgets for tertiary education draw a quite dramatic picture of the challenges in lower income countries and particular in Sub-Sahara Africa. Sound higher education strategies are needed, which include effective budgetary allocation of public funds as well as provisions to solicit private investments. As it is the case in Brazil, the model of institutes of technology that only conduct teaching is less costly than full research universities. The creation of diversified institutions may lead to lessen the burden through diversified costs.

International development institutions may lead to lessen the burden through diversified costs.

National development cooperation should begin by supporting “lighthouse universities” in developing sustainable financing mechanisms, which then could be scaled-up. It is also important to take into consideration regional players such as the African Union, especially when states do not have the means to cover all aspects of education.

Quality: SDG 4 puts a strong focus on quality, relevance and governance in the education sector. There is indeed the need for targeted policies in higher education. Success factors for system reforms to enhance quality and relevance are jointly developed visions and strategies, strong government support, financing and a multi-stakeholder approach. Quality assurance mechanisms and good institutional management are key. A set of tools and information systems for higher education management should be provided. Harmonised evaluation frameworks should be developed further. Better training and mechanisms to support university leaders are essential to make sure that university managers have the necessary skills.

Scholarships as a means of implementation: Expanding the number of scholarships for developing countries is a means of implementation (4 b) for achieving SDG 4. There is an increasing number of scholarships for individuals from least developed countries but yet little coordination between different donors and programmes. Furthermore, some programmes do not yet have a clear focus on SDG relevant topics. To ensure that scholarships have an impact on sustainable development, funding partners need to strive to align their efforts with the sustainability strategies of the partner countries and the policies of their higher education institutions.

To promote equal access and inclusion scholarships need to be part of a coherent strategy. Additionally, strong support structures for the target group should be in place. The risk of brain drain should be carefully considered when granting scholarships for studies in the global North. Online and blended learning generally has the potential to improve access to higher education especially for
marginalised groups – more scholarships are needed for such study programmes. Alternative ways of funding, for example study loans or public private partnerships, should be explored further.

OUTLOOK

The organising institutions identified the following core issues to jointly further discuss and pursue:

Good practices for joint knowledge creation and international learning should be scaled up: The NoPa approach combining instruments of academic research promotion and development cooperation, the bi-cultural Master’s Programme GAMP that promotes international learning in development focal areas, or the SDG Graduate School Programme exploring inter- and transdisciplinary approaches in higher education cooperation programmes for SDG relevant topics.

Substantially more financial resources are needed to meet the challenges of broader access, quality and relevance of higher education systems in low-income countries (e.g. in Sub-Sahara Africa): National and international resources should be used effectively. Diversified financing strategies in terms of providers (public versus private) and their scope (teaching institution or research university) should be considered, as well as the support of higher education “lighthouses”.

To unfold the potential of scholarships to achieve SDG 4 they need to be embedded in coherent (national and international) strategies. More scholarship programmes that promote joint learning of students from the global South and global North as well as scholarships for online and blended learning should be established.

From an African perspective, eye-level partnerships between development cooperation and local regional or national institutions are requested. Visions, strategies, and research agendas of the global South need to be respected.

Germany is among the leading donors for education. German development cooperation is equipped with a diversified and integrated set of instruments. Now it is our turn to make a significant step forward to achieve SDG 4 – and beyond that to contribute to the realization of the 2030 Agenda as a whole. The announcement of acting Federal Minister for Economic Cooperation and Development, Dr Gerd Müller, to increase investments in education up to 25% of BMZ’s commitments provides a promising foundation for an intensified engagement.

Existing incentive and funding schemes in the scientific system as well as in international cooperation must be adapted to promote more joint knowledge creation. The German government should increase its investment of ODA in research and development to provide a cornerstone for joint knowledge creation and therefore joint legitimacy.

Strengthening synergies: Germany should further intensify the collaboration between the implementing organisations as well as the interdepartmental coordination between the Federal Ministry for Education and Research, the Federal Foreign Office and the German Federal Ministry for Economic Cooperation and Development.
Introduction

By adopting the 2030 Agenda for Sustainable Development, a paradigm shift has occurred: Science and higher education are both an integral part of the overall agenda and a target on its own.

The 2030 Agenda explicitly calls for a greater involvement of higher education and science in focal areas such as food security and sustainable agriculture, climate change, health as well as innovation, infrastructure and others. Furthermore, higher education and science is key to working towards the vision of global partnership (Sustainable Development Goal (SDG) 17): Local answers to pressing global questions, higher education and science build capacity for cooperation on equal footing.

As part of SDG 4 (quality education), the standards against which higher education will be measured are high: Tertiary education should be equally accessible, affordable and of high quality (4.3.). Furthermore, it should promote skills that are relevant for employment, decent work and entrepreneurship (4.4). More scholarships should be given especially to least developed countries (LDCs) (4.b.). Well-trained scientists, teachers and competent graduates working in seminal positions are needed – in the global South as well as the global North.

Higher education and science are drivers of transformation. In co-operation with policy-makers, business and society at large, the scientific community is tasked with developing visions for more sustainable societies, exploring development pathways, and supporting sustainable technological and social innovations. Higher education should create problem awareness and promote systemic thinking, thus empowering people to participate in and shape the transformation process.

Taking advantage of the momentum of the 2030 Agenda, the expert meeting aimed at critically reflecting current approaches in strengthening higher education and science and generating ideas how to achieve sustainable development: Are we doing the right things? Could we do better? How?

Experts and practitioners in the fields of higher education and science, development and international cooperation, and partners from politics and the private sector as well as representatives from donor organisations were invited to share their expertise and perspectives. The envisaged outcome was to comprise recommendations for universities and scientific institutions, development cooperation agencies, the private and civic sector, as well as political and financing bodies, in the North and in the South.

The meeting was jointly organised by the Federal Ministry of Economic Cooperation and Development (BMZ), Alexander von Humboldt Foundation (AvH), German Academic Exchange Service (DAAD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and KfW Development Bank (KfW).

This expert meeting was the highlight of an on-going process in the joint approach of German organisations to further the SDGs through higher education and science. The preparations for the meeting alone took one year in which the core team consisting of representatives of the four organising institutions and the BMZ met for nine face-to-face interactions.

Experts and practitioners in the field of higher education, science, development and international cooperation came together for a participatory multi-stakeholder dialogue, which spanned over one and a half days incorporating multiple approaches: Keynotes, Thinking Labs (TLs) and Open Spaces (OS). Prior to the meeting, 43 participants had been actively involved in shaping the programme. The encouraging participatory nature of the event led to the increase of this number with two additional OS topics emerging at the meeting. Throughout the meeting, facilitators Barbara Unger and Hinrich Mercker guided the plenary sessions and from the start made the plea for participants to enter discussions with an open mind, to listen and contribute irrespective of title, gender or experience, to shape a thinking environment in a co-creative manner.
HOW HIGHER EDUCATION AND SCIENCE CAN CONTRIBUTE TO THE ACHIEVEMENT OF ALL THE SDGS

Higher education and science are seen as drivers of transformation in all development areas. The higher education and scientific community is tasked with developing visions for more sustainable societies, exploring development pathways, supporting sustainable technological and social innovation, and empowering people to shape the transformation process.

The following questions emerging from these challenges guided the reflections and discussions of day 1:

• What does sustainability mean for higher education and science and how can it be ensured?
• What kind of higher education do we need to train qualified and responsible decision-makers, experts and scientists?
• How can scientific research help to generate findings of relevance to the sustainable transformation of our society? How can we make better use of these findings?
• Which kind of partnerships and communication structures are key to this process? Who learns from whom and what do they learn? Between South and North, with stakeholders from politics, society and business, and from the development cooperation arena.
• How does the higher education and research sector need to proceed in order to fulfil these tasks? What good practices exist? What kind of resources and incentives are needed to support this development?
OPENING REMARKS
BY ROLAND LINDENTHAL

Roland Lindenthal, Head of Division Education and the Digital World, BMZ highlighted the importance of the expert meeting and the commitment of the German development cooperation to education. Education is everything; it is a human right and key to development. The life-long learning concept of education includes not only basic and secondary education, but also technical and vocational education and training (TVET) as well as higher education. This concept is reflected in the BMZ Education Strategy. In line with the SDGs, it takes into account all levels and forms of education. Germany is one of the leading donors in education in terms of Official Development Assistance (ODA). BMZ has announced to increase investments in education up to 25% of its commitments. An exchange with world experts, as enabled by this gathering, is crucial to development cooperation. Mr Lindenthal expressed his gratitude to the organising institutions for dedicating resources to this conference.

KEYNOTES

PROF DR DIRK MESSNER

Prof Dr Dirk Messner, Director of the German Development Institute (DIE), kick-started the expert discussion by addressing the importance of higher education and science for the implementation of the Agenda 2030 in the international development context. Looking at LDCs, it is often argued that investing in higher education and science is just a luxury. However, there are ample convincing arguments which can substantiate the importance of both aspects for sustainable development. In his speech, Prof Dr Messner highlighted five key points to underpin the important role of higher education and science for sustainable development and how they should be embedded in the 2030 Agenda:

1. The 2030 Agenda is being implemented in times of global change. Furthermore, the 2030 Agenda is very ambitious – the achievement of the 17 SDGs requires transformative action. There are still immense knowledge gaps regarding the interconnections between these goals in the country specific context and in the global arena. Research is key to analysing these cross-cutting issues and providing strategies adaptable to dynamic global changes.

2. The debate on knowledge and development thus far focuses on knowledge sharing. Shared knowledge is important to advance the transformation towards a sustainable society, but it is not sufficient. A large part of the knowledge necessary to solve sustainability problems is still being produced in industrialised countries. Joint knowledge creation is key to finding good solutions and for facilitating collective action in international cooperation.

3. The incentive systems for the joint development of knowledge between actors from industrialised, newly industrialised and developing countries are unfavourable. In industrialised countries and in enterprises, it is generally acknowledged that three percent of economic power should be invested in research and development, in innovation, that is, the creation of new knowledge, in order to create future viability. This principle should also apply to international sustainability cooperation. The German government should therefore invest three percent of ODA in research and development to provide a cornerstone for joint knowledge creation and therefore joint legitimacy.

4. Technical and financial international cooperation are essential for the implementation of the 2030 Agenda, but they are not sufficient. Tangible short-term results are expected in the framework of the two leaving no room for knowledge creation, which is inherently a long-term process. There is a need for a third pillar in
international cooperation – joint knowledge creation. Without this third pillar the existing path dependencies arising from current structures are prolonged. Moreover, looking at the academic landscape, there are also adverse mechanisms which make joint research with less renowned institutions difficult. Universities look for strong partners in research which excludes those who do not belong to the best of the best and there are no incentives to do otherwise. Thus, reforms in development and science are needed to allow for collective transformative actions in order to jointly achieve the SDGs.

5. On a more positive note, various actors are already cooperating in a density that has never been seen in human civilisation: Universities, non-governmental organisations (NGOs), private firms and other cultural actors are already cooperating across borders. Linking these networks with knowledge actions translating into a third pillar in international development sparks hope for the future.

PROF DR HEILA LOTZ-SISITKA

Prof Dr Heila Lotz-Sisitka holds a chair of the South African National Research Foundation in Transformative Social Learning and Green Skills Learning Pathways. In her keynote, she provided an insight into the role of higher education and science in the implementation of 2030 Agenda from the perspective of an educator, through a reflection of her lifetime commitment to transformative education. She shared three examples from the Southern African region how the concept of “T-Learning - transformative, transgressive, transdisciplinary learning” can be infused into higher education and science.

Today, we are confronted by the voices of students who are calling for a different kind of higher education. They are calling for free, quality, relevant, de-colonised education – pointing at the social (in)justice of education as it has been produced to drive the industrial revolution, exported via colonialism and entrenched via neo-liberal tendencies for the majority of the world population. Research often talks about the “Quadruple Squeeze” we face: ongoing inequality, ecosystems under pressure, climate change and the element of surprise. Rather than giving in to these ontological conditions, we should see the potential they bear for joint response and associated changes in higher education research and learning.

When it comes to knowledge production and learning, we find ourselves in a skewed scientific system. There is a consensus that the scientific world has excluded a large number of people. Epistemic marginalisation at systemic level is affecting science and learning praxis. There is a need to counter historic and structural epistemic exclusion and marginalisation, which is essential for sustainable development.

Despite the large volumes of knowledge being produced on sustainability, it is difficult to translate this knowledge into action. We think about issues in boxes rather than in an integrated manner, impeding our capacity for action. Not only do we need to co-produce more knowledge in new and different ways, but we also need better ways of recognising and activating knowledge into use.

At the core of transforming into sustainable societies there must be an investment in transformative learning and research. Such an approach must include co-creation of knowledge in interdisciplinary and transdisciplinary configurations in ways that address the problems of exclusion and ongoing marginalisation in knowledge production processes.

Curriculum, research and pedagogical re-orientation and innovation in higher education are essential for the 2030 Agenda, particularly for scientific capacity building. They must be carefully situated in social-ecological and socio-technological contexts, if they are to be relevant to the contexts in which the issues and the 2030 Agenda alternatives are to arise. We need partnerships for sustainable development that are creative, co-constituted, committed, and ‘joined up’ across borders and boundaries.

Co-operative, social learning models to catalyse the transformative approaches to curriculum, research and pedagogy are possible as can be seen in initiatives that have been developed in the Southern African region:

1. The Programme for Climate Change Capacity Development (PCCCCD) of the Southern African Regional Universities Association (SARUA) organised a mapping study in 12 countries in order to develop a
knowledge co-production framework, which includes seven co-defined research themes and three cross-regional knowledge and capacity development networks. http://www.sarua.org/?q=content/knowledge-co-production-framework-climate-compatible-development

2. The Fundisa [Teaching] for Change Teacher Education Programme has mobilized multi-dimensional T-learning partnerships between NGOs, universities, schools, ministries of education and environment and the private sector. The synergies of the networks made it possible to have a significant impact on the Education for Sustainable Development (ESD) at national level. It is currently being expanded to the sub-regional level. http://fundisaforchange.co.za/

3. The Transgressive Learning in Times of Climate Change (T-learning) initiative aims at developing a learning network for co-engaged research and practice. The T-Learning Network links scientists, educators, civil society, policy makers, business and other stakeholders across nine countries in selected T-learning community sites. The so-called “T-learning LABS” in Africa, Asia, Latin America and Europe allow to develop the inter-cultural understanding of such learning processes.

http://transgressivelearning.org/about/

THINKING LABS

The Thinking Labs (TL) were designed to mobilise participants’ best ideas and encourage them to contribute actively, bringing in their expertise and experiences. Participants had the opportunity to attend two of the total four TLs on offer on day 1 - one in the morning and one in the afternoon session. The objective of these labs was to search for creative responses to existing challenges in higher education programmes with regard to contributing to the achievement of the SDGs.

TL 1: GERMAN-ARAB MASTER’S PROGRAMMES: SOUTH-NORTH NETWORKS FOR JOINT LEARNING AND RESEARCH IN THE DEVELOPMENT CONTEXT

Werner Wasmuth, GIZ; Andreas Böhler, DAAD; Dr Ayat Ismail, Ain Shams University, Cairo; Franziska Laue, University of Stuttgart and Anas Farraj, WEE Pros GmbH and IWRM graduate

The German-Arab Master’s Programmes (GAMP) are in line with the focal areas of the German development cooperation with the countries of the Middle East and North Africa (MENA) and commissioned by the BMZ. The post-graduate study programmes were established in response to the lack of qualified Arabic and German specialists and executives for international cooperation. Consequently, five master’s programmes were developed in priority fields: Integrated Water Resources Management (IWRM), Economics of the Middle East (EMEA), Renewable Energy and Energy Efficiency for the MENA Region (REMENA), International Education Management (INEMA), Integrated Urbanism and Sustainable Design (IUSD). While the five master’s programmes differ in their technical focus, they jointly emphasise intercultural and management skills, the MENA region, practical application, and international development cooperation. The concept goes beyond regular study exchange programmes as students stay together as one group throughout the entire programme at both partner universities. GAMP stands for a transdisciplinary worldwide network with great potential for international cooperation. Up to now, roughly 400 students successfully graduated from the programmes, over 80% found relevant employment within up to 12 months after graduation. For further information on the GAMP see: http://gamp-online.net/en/index.html

Discussions in this TL were guided by the following key questions:

- What is the potential of intercultural study programmes for achieving sustainable cooperation between the universities involved and for initiating change processes?
- What are the opportunities and challenges of cross-sectoral / (supra-) regional approaches in teaching and research?
- How do we link theory with practice in order to contribute to sustainable development?

Werner Wasmuth discussing the German-Arab Master’s Programmes
Participants agreed that the SDGs are more visible than the MDGs as now developed and developing countries are addressed at the same time, which corresponds with the intercultural set-up of the GAMP. Intercultural higher education programmes such as the GAMP can be considered suitable approaches to support sustainable development through joint knowledge production and joint solution development. At the institutional level, participating in the GAMP has paved the way for universities to engage in further international partnerships. Furthermore, international cooperation in higher education and science can help to build bridges in times of political conflicts between countries.

The GAMP student body is increasingly diverse in their cultural and scientific backgrounds, which requires increased facilitation of communication between students themselves and teachers. Lessons learnt from past cohorts and regular feedback rounds with students are taken into account to constantly update the concept and revise the curriculum. Support structures for students such as buddy systems are offered, and students are actively prepared for the transition from one location to the other, e.g. through language courses. Moreover, the GAMP strives towards strengthening interdisciplinary research, teaching and learning as well as applying academic knowledge to real life problems, e.g. master theses and fieldwork. Activities are aligned with the SDGs, e.g. IUSD brings the discourse on the SDGs as part of the curriculum into the faculties in Germany and Egypt; especially SDG 11, cross-cutting with SDG 13 and SDG 4.

Furthermore, innovative approaches were introduced to the MENA region. Extra-occupational and blended learning models are important for life-long learning and digitalisation which in turn are important concepts outlined in the 2030 Agenda and SDG 4 for achieving education for all. Participants agreed that the potential of digitalisation in higher education lies rather in the possibility to include marginalised groups of people (e.g. refugees) than in reducing costs of higher education. International programmes like the GAMP can help to improve the reputation of online learning and diminish the "digital divide".

The GAMP alumni are ambassadors of their programmes and living proof of the potential of the GAMP model to contribute to sustainable development. GAMP graduates work for ministries, NGOs or development agencies such as GIZ, which displays the most important “return on education” - people getting good jobs. Efforts should be intensified to study the effects of higher education programmes and alumni contribution to change, e.g. by means of alumni tracer studies. The GAMP has very active alumni such as the IWRM alumni who recently founded the consultancy “WEE Pros” (water, environment, energy). In order to seize the great potential of alumni, universities in Germany and the Arab world need to work on putting sound alumni management strategies in place.

Higher education in general and especially intercultural study programmes are resource-intensive (e.g. due to mobility of students and staff and thus, high coordination needs) and require time and patience to be established and sustained. Long-term agendas such as the 2030 Agenda take this into account but pressure in development cooperation to show quick results contradict it. Long-term funding schemes are necessary for programmes like the GAMP to be able to contribute to sustainable development.

BMZ funding for the GAMP will cease by the end of 2017 and the exit strategies of the master's programmes differ. All programmes opened up for international students, broadening funding opportunities, e.g. Indian students funded by the Indian government are now joining the REMENA programme. In addition to third party funding, REMENA also charges tuition fees, while another programme has applied for funds from the EU. Some programmes have also transitioned into another funding scheme provided by DAAD (EPOS: Development-relevant Post-graduate programmes - scholarships for students from OECD countries). However, in order to preserve some of the original nature of the GAMP, regional quota in favour of students from MENA should be applied to EPOS.

**TL 2: NEW PARTNERSHIPS FOR INNOVATION IN SUSTAINABLE DEVELOPMENT – THE CONNECTION BETWEEN RESEARCH SUPPORT AND DEVELOPMENT COOPERATION PROJECTS**

Ilona Daun, DAAD; Christoph Büdke and Marcus Regis, GIZ

Synergies between the research community and development cooperation actors are indispensable to achieve the SDGs. However, challenges such as different paradigms, missing knowledge of researchers about the pressing needs in the field, difficulties in translating research results for practitioners and users, insufficient competencies of users (e.g. local enterprises) to take up research results hinder the establishment of cooperation. Thus, the discussions in this TL were guided by the following key questions:

- Can bilateral research actually contribute to local development needs?
- How do we promote sustainable and effective connections between the research community and development cooperation actors?
- How do we integrate research results into development initiatives for greater impact?

The “Novas Parcerias” (NoPa) programme of GIZ, DAAD and the Brazilian higher education support agency Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) is a best practice of how joint knowledge creation can be promoted by combining instruments of academic research promotion and development cooperation. A key element in the NoPa programme is the joint identification of relevant research topics, objectives and selection criteria
by representatives of the academia, funders and prospective users of research results at the very beginning of the cooperation process. The input of such a committee is then included in a call for projects. While the call is open, a matchmaking event gathers candidates and provides them with a platform to establish partnerships for proposals that includes both researchers and practitioners. These proposals are then selected by research funders with the technical support of the committee that identified research demands in the first place. During the implementation of the selected projects, the interface between research and practice is provided by focal points – professionals that combine solid technical knowledge in the relevant area with good networking among prospective users of research results. Finally, Research-into-Use workshops are held by research projects as they approach their completion. These workshops have the objective of presenting research results and paving the way to the continuation of partnerships so that actual innovation can be achieved.

Facilitating communication among stakeholders of such diversity is a key element of NoPa’s approach. The focus on building partnerships that last beyond the duration of research projects themselves is crucial to deal with the fact that the results achieved require further development so they lead to concrete, innovative products.

NoPa’s successful implementation in Brazil may lead to equally successful results in other regions of the world provided that adaptations are made to their specific needs and constraints. In that sense, many participants of the TL have considered integrating similar partnership programmes in their home countries. For instance, in the context of Sub-Saharan Africa, with the exception of some top-level research institutes, priority might be given to develop and strengthen research capacities before focusing on partnership programmes that are more complex, especially when including private companies.

In general, participants enthusiastically encouraged the BMZ, national governments, GIZ and DAAD to multiply and adapt NoPa’s multi-stakeholder, problem-solving approach to other countries.

For further information on the NoPa programme see: http://www.nopa-brasil.net/en/index.html
For the NoPa – Toolbox see: http://www.nopa-brasil.net/downloads/236_nopa_reader_online.pdf

TL 3: BILATERAL GRADUATE SCHOOLS CONTRIBUTING TO THE DEVELOPMENT OF TRANSFORMATIVE RESEARCH APPROACHES

Lars Gerold, DAAD; Prof Dr Philipp Misselwitz, TU Berlin, Department of Architecture; Taki Sithagu, University of the Witwatersrand, School of Architecture and Planning; Aditya Kumar, Development Action Group (DAG)

Using the example of the "Wits-TUB Urban Lab – Interdisciplinary Bilateral Postgraduate Studies programme for sub-Saharan Africa (IBPSA)", the group of 25 experts explored to what extent higher education institutions can contribute to the 2030 Agenda through the guidance of the following key questions:

- How can a joint application-oriented research agenda be developed that supports the implementation of the 2030 Agenda?
- How can external stakeholders from the spheres of politics, economy and society be involved to ensure social impact and sustainability?
- How do we integrate innovative methods of digital learning?

The Bilateral Graduate School approach of the Department of Architecture of the Technical University of Berlin and the School of Architecture and Planning of the University of Witwatersrand departs from concrete urban challenges mainly in Johannesburg where historical racial separation has to be overcome while avoiding a new separation of rich and poor. To be able to do so, students and professors must experience complex problems and develop systemic solutions – and go beyond technical planning.

Students are invited to physically leave the university campus and get in touch with the communities. Aditya Kumar presented the jointly developed “Corridors of Freedom” approach as an example in practice how to link housing planning to transportation, workplace, education and other daily life issues. New curricular elements are
needed such as a radical expansion of field work, specific communication training, urban politics and participatory planning courses. International change of perspectives can inspire solution finding processes for local challenges, e.g. the joint analysis of gentrification problems in Berlin can help to intelligently tackle similar processes in Johannesburg.

In the discussion the indispensable triple outbreak for the SDG Graduate School scholars, the lecturers of the future, has been a key feature: (1) breaking through the disciplinary ceilings, (2) breaking through the walls of the university campus and (3) breaking through national boundaries have been identified as key pre-requisites for achieving SDG 11 (Urban Development).

But how can this be supported by research funding agencies? The participants concluded that it would be key to discuss these issues with their national research funding institutions to advocate that they shall accept transformative research results as of high quality - beyond the usual counting of publications in “referred” journals. For Germany, stronger resort cooperation is needed between the Ministries of Education and Research, and Development Cooperation at federal level as well as with respective authorities at the Federal State level. The multi-stakeholder mechanism to manage the implementation of the Global Action programme for Education of Sustainable Development might be seen as one promising step forward in this regard. Top researchers from the South argued that only by international collaboration, universities of the North will learn to understand better that many problems of the South will soon become theirs. If the next generation of Africans will not find decent urban solutions, they might well migrate and create severe urban planning challenges in the North. According to the participants, funding for transformative research remains very scarce. Therefore, the group strongly advocated for a rapid extension of the Bilateral Graduate School programme.

How can the transformative approach be better supported by development co-operation? A government official made the argument that the model of joint research might be included in “classical” cooperation activities by reserving a significant share of the funding for “joint knowledge creation”. This might contribute to greater sustainability as parts of the support could be taken over by national research support schemes like the National Research Foundation of South Africa or involved universities. According to some participants, using digital tools will also be key as this can substantially reduce mobility costs - after an initial investment of establishing a strong personal network of the key stakeholders. A German researcher in African Studies expressed her concerns not to neglect other forms of knowledge such as traditional or “non-scientific” knowledge that might be of high value for a sustainable development. “Theories from the South” might need to be better promoted and recognised.

Recommendation:

- Radical change is needed
- Universities must get much more involved
- Students have to become exposed to reality
  … Otherwise the SDGs will not be reached.

For further information on the Bilateral SDG Graduate Schools see: https://www.daad.de/der-daad/unsere-aufgaben/entwicklungszusammenarbeit/foerderprogramme/hochschulen/infos/en/43968-bilateral-sdg-graduate-schools/

TL 4: LABOUR MARKET ORIENTED HIGHER EDUCATION – COOPERATION BETWEEN HIGHER EDUCATION INSTITUTIONS AND THE PRIVATE SECTOR

Dr Karola Hahn, GIZ and Prof Dr Anton Mangstl; Prof Dr Jürgen Bode, University of Applied Sciences Bonn-Rhein-Sieg (H-BRS); Prof Dr Natheer Abu Obeid, German Jordanian University; Tobias Wolf, DAAD

The success and impact of higher education institutions depend on a number of factors: the social, political and regional framework; the quality orientation of their research, teaching and management; their academic independence as well as cooperation arrangements with the civil society and the private sector. Thus, discussions in this TL were guided by the following key questions:

- What promising strategies exist for establishing strategic and institutional cooperation between universities and enterprises in developing and emerging market countries?
- How can the German model of dual study programmes be adapted to the context of developing and emerging market countries?
A further example of best practice in the promotion of entrepreneurship given was a project supported by the H-BRS in Ghana, where the Startup Award Green Entrepreneurship was established. Students are supported in developing business plans to compete for funding for start-ups or incubators. The topic of incubators sparked some debate amongst participants. Some were of the opinion that the concept was too “hyped” and there are now too many of them. It would be better to develop a strategy to define roles of universities and incubator hubs, work together and complement each other. Higher education institutions should prepare students for successful entry into existing incubator hubs.

Another approach in university-industry cooperation brought forward was the student market research programme at H-BRS. When a German SME identifies market potential in an emerging or development country, it can request an H-BRS student to make a mapping and analysis of the market in collaboration with a partner university in the target country. When the German SME decides to enter the market, it develops strategies jointly with the partner university, as they are familiar with the context. This approach provides opportunity for North-South collaboration on eye-level. Further information on H-BRS can be found on the following website: https://www.h-brs.de/en

As to the German model of dual studies, the example of Al-Quds University in the Palestinian Territories was brought up as a successful example of the triangular partnership between a university, the private sector and development cooperation. With German support through GIZ, Al-Quds University has launched three dual studies programmes developed in close collaboration with the private sector. Over 80 companies are involved in the development and implementation of curricula.

In conclusion, the promotion of employability and entrepreneurship through labour market orientation requires a fundamental change in the mind-set of various stakeholders to allow for innovative approaches. Stakeholders need to develop frameworks for strategic partnerships and approaches that are adaptable to the current and forecasted labour market.

RESULTS AND RESPONSES

After one participant from each TL had presented respective key findings and recommendations to the plenum, representatives of each of the four organising institutions were given the opportunity to respond.

Bettina Tewinkel, Head of Division Southern Africa, Health, Education, Social Protection, KfW, found the day to have been extremely with insights on higher education from different angles and various stakeholders. From the financial cooperation point of view, it is important to learn
about efforts made to improve applicability of research and to join forces with private sector to achieve broader impact, especially in the labour market. Furthermore, it was appreciated that the BMZ expressed the aim of dedicating 25% of ODA to education, including the primary, secondary and tertiary sector.

Dr Thomas Hesse, Deputy Secretary General, AvH, asserted that the idea that education is important for achieving the SDGs was clear to all from the beginning, but to what extent became clearer throughout the day. There was the plea in the morning to enter discussions with an open mind; in fact he experienced the discussions in the TLs to also function as mind openers. A lot of best practices were presented today. Funding organisations should focus on these best practices and nourish them to progress towards achieving the SDGs and not to start from point zero over and over again.

Carsten Schmitz-Hoffmann, Head of Division Economic and Social Development, GIZ, stressed that we are facing an ever-changing environment and the circles are extremely fast. We need to operate in a flexible and dynamic way. Thus, we need innovation, and there is no innovation without science. However, we also have to be fast. We may learn from the digital world here and enter into a prototyping mode. In addition, we need real eye-to-eye partnerships because co-creation of knowledge has never been more important. Another important lesson-learnt is that we have to believe in the impact we can achieve through the capability and interoperability of the tools and instruments we have.

Stefan Bienefeld, Head of Division for Development Cooperation, DAAD, had taken from the day that change is needed on different levels to increase higher education and science in development cooperation. Firstly, the inclusion of the two needs to take place in the planning phase. Secondly, the issue of funding 25% of ODA for education sounds promising. Thirdly, structures and project design – we need to listen more closely to partners and involve more non-academics in the project design phase to ensure relevance such as in the case of NoPa. Fourthly, we need people on the partner side to work with; therefore, we need to continuously invest in capacity development to produce meaningful results. Lastly, although development cooperation demands fast solutions, education needs time. We need more than 3-year phases and more security to be able to plan for the long run.

RECEPTION AT HUMBOLDT UNIVERSITÄT ZU BERLIN

In the evening, participants were welcomed by Prof Dr Eva-Inés Obergfell, Vice-President for Academic Affairs of the Humboldt Universität zu Berlin (HU). She found that throughout the first day, fruitful discussions have given interesting impulses for further elaboration and have helped to draw near one of the conference’s aim, namely to stress the central role of higher education and science. Both are vital to meet the needs of our society and to safeguard its future. Ms Obergfell emphasised the importance
of sustainability in research and teaching, which requires cooperation with non-university partners, continuity and long-term perspectives. Universities as crucial higher education institutions face the challenge of exploring conditions for such a sustainable society. This includes encouraging interdisciplinary methods and stimulating innovative, application- and solution-oriented research and teaching. Last but not least, higher education and science depend on a sustainable funding policy that offers incentive structures for anchoring sustainability more strongly.

Dr Susanne Neubert, Director of the Centre for Rural Development (SLE), presented the approach of the SLE in educating young development managers which attempts to interlink academic and practical perspectives in their postgraduate and executive programmes. Furthermore, the subsidiary to the HU conducts multi-level, multi-dimensional and multi-disciplinary applied research projects in the global South.

Prof Dr Narciso Matos, Pro-Rector of the Polytechnic University of Mozambique who received his PhD in chemistry from HU, highlighted the social aspects of higher education and research through a narration of his own experience of studying abroad. Intercultural connections have enabled him to build valuable professional networks and friendships still relevant today.
Day 2

Higher Education and Science Play an Essential Role in Achieving SDG 4

As part of SDG 4, the standards against which higher education will be measured are high: it should be universally accessible, affordable and of high quality. Furthermore, it should promote skills that are relevant for employment, decent work and entrepreneurship. More scholarships should be granted to least developed countries in particular. There is a need for well-qualified researchers, teachers and competent graduates to fill seminal positions – in the global South as well as the global North.

The following questions guided the reflections and discussions of day 2:

• How can we ensure quality and relevance in higher education while at the same time expanding equal access and inclusion?
• How do we finance higher education systems facing the challenges of quality and broader access? What mix of financial instruments is appropriate (public and private, North and South)?
• How do we ensure that an increased number of scholarships for least developed countries have an impact on sustainable development?
In his presentation titled “Expansion, Inclusion and Quality in Higher Education: From Taboo to Totem”, Prof Dr Dilvo Ristoff from the Federal University of Santa Catarina in Florianópolis, Brazil, elaborated on reflections on how to translate relevant targets of SDG 4 into meaningful and feasible higher education strategies at governmental and institutional level. Based on experiences from Brazil, he addressed strategies and challenges with regard to enhancing quality and relevance in higher education while at the same time increasing access and inclusion in the sector.

Talking about inclusion, expansion and quality in higher education was once forbidden in Brazil, but with the UNESCO World Conference on Higher Education and the SDGs a new vision was put in place. Higher education has been regarded as strategic for the future image as a nation. It has proven to be fundamental for the advancement of arts, sciences and technologies and the promotion of democracy that implies the creation of a social and educational system with opportunities for all, not only for privileged groups or for the elite.

The Brazilian National Education Plan of 2001 envisioned the idea that “no country can aspire to be developed and independent without a strong higher education system”. A strategy towards this vision was set, which included expansion, inclusion, quality assurance and accreditation, use of new technologies, teachers’ training, and internationalisation.

In 2015, the gross enrolment rate (GER) of those between the ages of 18-24 was 21%. Despite the success in recent years and the significant growth in enrolments, Brazil still has a long way in potentialising youth. Thus far, significant expansion has taken place primarily in the private rather than the public higher education sector. However, more than half of the students attending private institutions are funded by the public sector. The expansion and inclusion in Brazil is therefore a result of public-private-partnership.

The success of this expansion/inclusion policy in Brazil, which is aligned with the call for action of SDG 4: “Ensure inclusive and quality education for all and promote lifelong learning”, can be attributed fundamentally to five major national programmes:

1. PROUNI (University for All – Scholarships)
2. REUNI (Recovery and Interiorisation of Federal Universities)
3. FIES (Student Loan Programme)
4. SISU (National Screening Process for applicants to public universities – combined with a quota system)
5. IFs (Federal Institutes of Technology)

The best indicator for expansion and inclusion is a new socio-economic profile of students, which has changed dramatically in Brazil in terms of a student’s family income; school background; colour; parents’ schooling and condition regarding the need to work for his or her livelihood. The five programmes have indeed initiated a positive shift.

As to the issue of quality assurance, the Higher Education Evaluation System (SINAES) was designed to evaluate institutions, programmes and senior undergraduate students. Today, his evaluation system operates as the basic reference in the regulatory process of accreditation of programmes and institutions. Moreover, data shows that PROUNI scholarships students on average have performed better in university entry and exit exams, proving that expansion must not lower standards or diminish quality. In conclusion, the widespread idea that quantity is the enemy of quality is a myth that finds no support in the educational data, and that inclusion policies and programmes instead of jeopardising the quality of higher education programmes, liberate important creative energies that can be put to the service of society.

Further information can be found on our website http://www.higher-education-2030agenda.de, in Dilvo Ristoff’s paper “Expansion, Inclusion and quality: from Taboo to Totem”.

Prof Dr Dilvo Ristoff
A perspective on the issue of expansion, inclusion and quality from the African continent was given by Dr Beatrice Khamati Njenga, Head of Education Division, African Union Commission (AUC) in form of an interview guided by Hinrich Mercker.

What is your spontaneous reaction to what we have just heard from Dilvo Ristoff that access is in fact not the enemy of quality?

I like what he was saying. If indeed expansion and inclusion were the enemies of quality, then in Africa we must address one only. I like the idea that there is no social group that has the proprietary rights in intelligence when it comes to education and higher education.

How can we ensure quality and relevance in higher education while at the same time expanding equal access and inclusion?

At the African Union Commission, we are now envisioning further into the future. We have the African Agenda 2063 in which all the SDGs are domesticated and SDG 4 in particular is also domesticated in the Continental Education Strategy for Africa (CESA).

Relevance should always be seen as a significant part of quality. It is not of quality unless it is relevant. Education must meet the needs of the community. Agenda 2063 envisions a minimum of completion of secondary education for all and it calls for more affordable higher education. To ensure relevance there must also be a link between education and workforce development, human resources development. What are the projections for the labour market? What do we need in the future with respect to graduate numbers, qualifications, skills and competences for employment and entrepreneurship?

In higher education we also have quality assurance initiatives. If you want to support higher education in Africa, support these frameworks to be sure that we are promoting quality and Pan Africanism, which is a form of internationalisation.

When developing programmes for other countries – every donor, every development agency seems to have a programme for Africa. This is okay, but make sure that Africans have contributed to that. And not only that – work with legitimate conveners.

What are your priorities at the African Union and what would you wish for in international cooperation?

There is a lot of talk about eye-to-eye partnership. The thing is that any supported programme that comes with money will likely be taken up. With all the respect to those universities, they are likely to think what does the DAAD want and try to align with that. If we could begin to support those who have a vision to talk amongst themselves and compile ways on how to get there before the issue of funding arises. Once they know the direction they want, let
Recommendation:

• Digitisation provides many new opportunities in this regard. Using social networks can help reach out to students who do not have access to traditional information channels of universities. At the same time, it has to be taken into account that digital communication can produce new barriers to access and should therefore be designed as inclusively as possible.

Improving access includes minimising obstacles such as infrastructure, financial means, language barriers or modes of teaching and assessment. Inclusive educational chains play a central role to compensate low rates of progression through the school system. The early provision of bridging courses or financial and academic support for potential students can help to bridge gaps in educational levels. Core elements in promoting inclusive access to higher education are more flexible selection criteria and transparent, credible and legitimate selection committees.

Recommendation:

• Central concerns of the debate focused on measurable criteria to detect the socio-economic background and the academic potential of students applying for scholarship programmes. The educational background of parents, private or public character of secondary school education, motivation letter and personal interviews via Skype were identified as valuable criteria and assessment tools.

• Implementing fair, inclusive and efficient selection procedures is a very complex task. Mutual learning opportunities should be organised between universities and institutions offering support programmes for higher education.

• Flexible access criteria of digital open universities also contribute to increase inclusion, at least to those who have access to and the competencies to use digital devices and digital learning offers. By waiving entrance certification

OPEN SPACES

Participants were invited prior to and at the meeting to propose and host an OS session on day 2. One main idea was to incite an open discussion between participants on a given topic. In contrast to the closed format of the TLs, participants were also encouraged to move between sessions. Four sessions were predetermined while two sessions emerged at the meeting. The results of the OS sessions were subsequently displayed in the format of a self-guided gallery walk for all participants to explore.

OS 1: INCLUSION AND EQUITY
Christoph Hansert and Lena Leumer, DAAD; Dr Liz Marr, Open University, UK

• Why is inclusion and diversity management important in higher education? How can diversity management and equity be safeguarded in tertiary education and the science sector? What does the current situation look like? What good practices exist and what lessons can be learned from the field?
• What inclusion and equity opportunities and challenges do higher education institutions face as a result of digitalisation?

Three key strategies were identified as lying at the heart of shaping a more inclusive higher education landscape at a workshop organised by DAAD and GIZ in October 2016 on inclusion and diversity management in higher education: reaching all, improving access and increasing quality. Main results of this previous discussion were presented as a starting point for further debates.

Reaching all strategies implies context-sensitive outreach and communication approaches (language, channels of communication), based on a clear identification of the target groups, their specific background and needs. Outreach strategies should inform on and build trust in the support programmes and selection processes, and, at the same time, strengthen the general awareness of the value of higher education in a society.
but recognising diverse prior learning activities. The Open University UK, for example, facilitates to draw on academic trajectory and potential rather than on educational achievements that rely heavily on social background.

Increasing quality includes the provision of flexible and modular study opportunities as well as support beyond teaching like mentoring, skills training, alumni-networking and promotion of internship programmes. Capacity building of academic staff is key to inclusive education.

→ Recommendation:

• Digital technologies contribute to deliver teaching at distance level, digital learning can be of the same quality as residential learning and has a great potential for emancipatory learning. Edutainment developed in partnership with TV combined with free online learning offers have become popular in UK. Massive Online Open Courses (MOOCs) of renowned universities, online preparation courses to compensate lacking competencies can help to increase the quality of teaching and learning in higher education institutions under pressure.

• The group suggested to DAAD and development cooperation agencies to offer digital bridging courses to high potential applicants from disadvantaged groups who narrowly missed a scholarship award to give them a chance to succeed in subsequent selection processes. Possible dimensions of marginalisation to be taken into account in this context might be the country of origin as well as the educational background of the applicants’ parents.

• Furthermore, participants asked to include means to check not only the past academic career of candidates but also examine their future potential as researchers and teachers more closely. Three major universities from the global North and South exchanged their experiences with Skype-based interviews as a fixed element of scholarship selection processes.

OS 2: FINANCING HIGHER EDUCATION
Ulrich Jahn and Dr. Detlef Hanne, KfW

• What are the characteristics of the current financial situation in higher education?

• How do higher education finance systems face the challenge of balancing quality and access?

• How do we enhance equity (e.g. through demand side financing, like stipends and student loans)?

• What experiences have been gained with different financial instruments (public/private/individual, national budget/international partners)? What are good practices?

Sustainable higher education and science requires sustainable financing. Ulrich Jahn and Dr Detlef Hanne began the OS session with an introduction to the status quo on funding for higher education and research in low-, middle- and high income countries. On average governments spend around 4-5% of their gross domestic product (GDP) for education and around 20% of their education budget for higher education (GEMR 2016, UIS). However, in absolute terms and its ratio to the student population, the higher education sectors in low-income countries are in need of more.

In addition to a high percentage of public funds dedicated to higher education and research, OECD countries have developed sophisticated funding models. In contrast, low-income countries do not have sufficient funding and funding instruments to compete internationally. Therefore, funding models of industrialised countries cannot simply be transferred to developing countries. A great challenge faced by the higher education sector in the latter is the act of balance between access and quality.

Higher education in many developing countries is not a priority. A change of mindset is required in order to realise that a country requires a sound strategy for higher
education, including effective budgetary allocations. It was also brought forward that not all institutions need to offer teaching and research to begin with. As is the case in Brazil, the model of institutes of technology which only conduct teaching is less costly than research universities. The creation of diversified institutions may lead to lessen the burden through diversified costs.

In addition to national public efforts, the private sector should be enticed to invest financially and technically. The private sector needs to be involved in order to ensure relevance and thus quality of higher education. It is also important to take into consideration regional players such as the African Union, especially where many states do not have the means to cover all aspects of education. As to the contribution of international development cooperation, it was suggested that donor partners should begin by supporting lighthouse universities in developing sustainable financing mechanisms, which could then be up-scaled and adapted to a larger system.

The group further discussed the chances of information and communication technology (ICT) in reducing costs and enhancing access for higher education through e-learning or MOOCs. Indeed, the experience of the Open University in Brazil shows that the performance of mathematics students enrolled in distant learning is superior to their peers in physical attendance. Furthermore, the Frankfurt School of Finance has seen great successes with its online executive courses with participants from all around the world.

**OS 3: ENHANCING QUALITY, GOVERNANCE AND RELEVANCE – THE ROLE OF HIGHER EDUCATION MANAGEMENT**

Stefan Bienefeld, DAAD; Prof Dr Mike Kuria, Inter-University Council for East Africa (IUCEA) and Dr Karola Hahn, GIZ

SDG 4 is of utmost importance to achieve all other goals of the 2030 Agenda for Sustainable Development. It puts a strong focus on quality, relevance and governance in the education sector.

Using example of projects in Africa, the following questions were discussed:

- How can universities define and identify relevance in teaching and research? How can they anticipate future needs?
- What mechanisms can universities put in place to enable them to practice a culture of continuous responsiveness and improvement of quality?
- How can universities collaborate with the labour market in curriculum development and quality assurance processes to enhance the relevance of their degrees?
- How can internal mechanisms be implemented in universities in order to increase and assure the quality of educational offerings?
- How can internal and external quality assurance mechanisms be combined efficiently?
- What role does higher education management play in these processes?

As the starting example, Prof Dr Mike Kuria introduced the quality assurance Project in East Africa. Herein, two important bodies are involved: The East African Community (EAC) and the IUCEA, which advises the EAC in matters of higher education. The main aim of the project is the implementation of a regional system of quality assurance in East Africa. It is currently developing quality assurance instruments for trial and conducts quality assurance capacity development at pilot universities. To date, approximately 70 quality assurance officers have been trained, curricula reviewed and a quality assurance forum set-up. A handbook “Roadmap to Quality” has been issued at programme level and institutional level. There is a strong cooperation with national authorities, which is key to the harmonisation of the individual quality assurance systems. However, there are still challenges to be overcome such as the move from resistance to acceptance for many to reach the institutionalisation of quality assurance. Furthermore, the development of benchmarks for different subject areas still requires improvement and employers should be included in the process to enhance relevance of education.

The CEO of SARUA pointed out an important confluence of the quality assurance initiative in East Africa and the harmonisation of African Higher Education Quality Assurance and Accreditation (HAQAA) Initiative of the African Union supported by the European Union. In Southern Africa, the Southern Africa Development Community (SADC) has named quality assurance as a key priority. Quality assurance agencies have come together and a needs assessment has been conducted. Thereby, challenges have been identified, including the uneven development, changes in student constituency challenging traditional structures and the need for capacity development. Different systems and languages are challenges but should also be seen as an opportunity. She encouraged DAAD and GIZ to engage in the SADC discussion and called for different regional harmonisation initiatives to be brought together.

The representative of the Conseil Africain et Malgache pour l'enseignement supérieur (CAMES) stated that with support from DAAD, capacity building in West and Central Africa has increased, tools for programme and institutional evaluation have been developed and mechanisms enhanced. However, a challenge is the centralised tradition inherited from the French. The representative of the Ministry of Higher Education and Research, Senegal also brought the call for the harmonisation of initiatives forward. He stressed the need for sub-regional understanding to enable regional integration. Senegal has its own vision for higher education in which capacity development, networking and labour orientation are key. National quality assurance authorities, CAMES, HAAQA need to coordinate their efforts for effective quality assurance.
The Pro-Rector for Institutional Development, Universidade Politécnica, Mozambique, elaborated on the self-evaluation mechanism of programmes that has been introduced in Mozambique. 16 programmes (out of a total of 900) have been evaluated, none of which passed with flying colours. This year 45 programmes are to be evaluated, the remaining by the year 2022. He sees a great challenge in the lack of PhD graduates for teaching and he highlighted the aim that a minimum of 50% of full-time lecturers should hold PhD degrees to ensure the quality of a programme.

The former Secretary General of the African Association of Universities and former President of the International Association of Universities emphasised that corruption in higher education is a general threat for quality and hence robust anti-corruption mechanisms need to be in place.

Recommendation:

• Success factors for system reforms to enhance quality and relevance are: Strong vision, joint strategy, strong government support, financing, multi-stakeholder approach
• Governing, leading and managing is key: Better training and mechanisms to support university leaders are essential to make sure that university managers have the necessary skills
• Clarification of roles and responsibilities: Coordination of different (sub)regional initiatives should be strengthened: Complementarity/subsidiarity is important
• Consultations: Funding agencies and development partners have to coordinate better and listen more closely to the needs of the partner countries. Where possible, they should support existing institutions and initiatives.
• A set of tools and information systems for higher education management should be provided; Common evaluation frameworks should be discussed and agreed on
• There is a strong need to combat corruption in higher education

Expanding the number of scholarships for developing countries is a means of implementation for achieving SDG 4. There is a high interest from donors to fund scholarships but little coordination amongst their efforts. Scholarship programmes should rather be integrated in strategic reforms than stand-alone measures. Scholarship funding schemes in general should be rethought and alternative approaches considered in order to lever impact. Best practice example: Higher education programmes in Brazil had ODA payments bound to local funding (for more information see Dilvo Ristoff’s keynote).

Recommendation:

• Coordination and harmonisation mechanisms for scholarship programmes should be strengthened. Alternative ways of funding should be considered.

It was discussed whether a critical mass of scholarships is needed to achieve impact. The DAAD has had positive experiences in strengthening higher education institutions in Eastern Africa through the funding of a critical mass of in-country/in-region scholarships in certain subjects areas. The AvH awards small numbers of individual scholarships to excellent researchers from developing countries, who in turn also affect change, e.g. by setting up their own programmes in their home countries. Programmes need to be designed backwards, starting from the intended impact and not just from the person to receive the scholarship. Moreover, quality assurance is important to strengthen the impact of scholarships.

While mobility and international exchange are vital to quality higher education and research (“brain circulation”), educating people from the global South in the glob-
al North poses the risk of “brain drain”. Few programmes have strategies to support students and researchers to return to their home countries. Sustainability of scholarship programmes depends on effective network and alumni management. As an example, the In-country/In-region Scholarship Programme of the DAAD offers short-term research stays in Germany in order to enable “brain circulation” and is complemented by opportunities for networking and further training or post-doc research.

Recommendation:

- **Scholarships are regarded as a suitable means of implementation but only if they are part of a coherent strategy and if programmes are designed carefully with regard to the specific impact they want to achieve. The risk of brain drain should be considered.**

There was consensus that the need for strong support mechanisms for the success of scholarship programmes is underestimated. The kind of support needed is context specific. For example, programmes for refugees need to contain psychosocial support structures as well as safety and mobility considerations, whereas the quality of supervision is key for successful PhD and master theses. Institutions usually know their respective needs but securing funds is often challenging and bureaucratic. A call was made for more flexibility with regard to funding support structures at universities.

Recommendation:

- **The importance of accompanying support structures for the success of scholarship programmes should be acknowledged. Elements of support corresponding to the actual need of students and receiving institution should be entailed.**

Experts reflecting about the instrument of scholarships in the designs of all scholarship programmes and sufficient resources should be earmarked.

SDG 4 requests “education for all”, which explicitly includes refugees and other marginalised groups for the first time. The 2030 Agenda serves as a strong argument for UNHCR to advocate for the integration of refugees into national education systems. UNHCR is now coordinating the delivery of tertiary education for refugees. However, from UNHCR’s point of view, classical scholarship programmes are not the solution for the higher education crisis of refugees as this group is highly mobile. New approaches are called for, e.g. scholarships for blended learning programmes such as the ones under the umbrella of the Connected Learning Consortium. For more information see [http://www.unhcr.org/innovation/labs_post/connected-learning/](http://www.unhcr.org/innovation/labs_post/connected-learning/).

With regard to inclusion overall, it was discussed that many scholarship programmes do not focus on changing the socio-economic profiles of student populations in a country/region but are designed to only support individuals who have been identified as academically excellent. It was further agreed that scholarships alone cannot repair damages done in primary and secondary education. For example, finding qualified female researchers remains a huge challenge for the AvH as female students in LDCs are less encouraged at previous stages of education. It was agreed that expansion, academic excellence and inclusion remain areas of tension in the field of higher education.

Recommendation:

- **In order to strengthen inclusion, scholarship programmes should consider equitable outreach as well as identification mechanisms. Online and blended learning has the potential to improve access for marginalised groups to higher education; more scholarships are needed for such study programmes.**

OS 5: INTERDISCIPLINARITY

Prof Dr Matthias Weiter, Humboldt University zu Berlin and Gilda Monjane, Gender Advisor, Ministry of Mineral Resources and Energy (MIREME), Mozambique

“Interdisciplinarity” is a word, which is often said and heard. However, there is a reoccurring debate on the definition of the word and the concept behind it. This OS session sought to define the concept of interdisciplinarity against the background of SDG 4 and the 2030 Agenda. The 19th century saw a transformation from universal science into disciplines due to the amount of knowledge available and the depth required to mastering it. Ever since there is an increasing specialisation in scientific fields but also in the complexity of issues needed to be solved, which requires a holistic approach. The 2030 Agenda also requires a holistic view encompassing the interactions between goals and thus disciplines. Hence, the concept of interdis-
Interdisciplinarity – an approach relating to more than one branch of knowledge – is imperative in achieving the SDGs.

The increasing specialisation of disciplines has led to a loss of integration and application to practical situations. Technical objects are socially embedded and thus, to be able to fully analyse a practical challenge, one needs to approach it from different perspectives. A dialogue needs to take place between different disciplines in order to address the issue at hand. This in itself is often a challenge as the current scientific system provides adverse conditions for interdisciplinary research.

Career scientists conduct research for results they can publish in renowned journals, which are largely discipline based. Furthermore, research topics are often defined by grants and tenders rather than on what society needs. There needs to be a rethinking of research paradigms. Scientists need to have an open mind for different perspectives, understand different methods of research and also their complementarity. Furthermore, practitioners should be involved in the development of research questions to ensure practical relevance. Cooperation between scientific disciplines and practitioners is key to solving cross-cutting issues as demanded by the SDGs.

Transformation has specific goals which need to be defined. Thus, we have to ask ourselves the following questions: What is transformation? Why do we need transformation? Who are the agents of transformation? How can we achieve transformation? In regards to Africa, these questions entail a degree of complexity due to the continent’s diversity.

How can we define a solution for all? Nevertheless, these are questions needed to be explored to ultimately address a key question in development cooperation:

- What are the key levers and topics of collaboration between African higher education institutions and development (donor) organisations?

Transformation requires a vision to work towards. Transformation in higher education can be an increased link between education, research and industry; internationalisation; shaping of the research agenda; or faculty development. The African Union (AU) has a vision and comprehensive strategy on education as well as on science, technology and innovation to further the development and transformation of the continent, which has been validated by the AU member states. Strategies as such need to result from bottom-up and decided upon by legitimate actors. All relevant stakeholders need to be identified and involved for the successful implementation of such strategies.

In order to achieve the envisioned goals, a series of processes have to take place. There needs to be an academic discourse on transformative versus non-transformative institutions. Quality and relevant teaching requires the necessary infrastructure. There needs to be an increase in transdisciplinary research and the strengthening of access to STEM – Science, technology, engineering and mathematics – which is readily available in the developing world. Universities have to make themselves a magnet to cooperation and develop their fields of expertise.

**OS 6: TRANSFORMING HIGHER EDUCATION IN AFRICA**

Prof Dr Phillip Clay, Massachusetts Institute of Technology (MIT); Dr Piyushi Kotecha, CEO of SARUA and Prof Dr Heila Lotz-Sisitka, Rhodes University, South Africa

Transformation has specific goals which need to be defined. Thus, we have to ask ourselves the following questions: What is transformation? Why do we need transformation? Who are the agents of transformation? How can we achieve transformation? In regards to Africa, these questions entail a degree of complexity due to the continent’s diversity.
WRAP-UP SESSION
SYNTHESIS BY DR INGRID JUNG

Dr Ingrid Jung, expert for Education and Sustainable Development, provided impressions as an independent observer and a synthesis of the expert meeting along the overarching guiding questions for each of the two days.

Day 1 focused on the potential contribution of higher education and science to the achievement of all SDGs. It is important to remind ourselves that the SDGs are goals for the North and the South. Moreover, higher education and science are not only drivers for possible solutions; actually, they have been part of creating many sustainability problems. It is worth and necessary to ask ourselves: What kind of knowledge production do we refer to? How to produce system change within the research community? Three introductory statements shaped the further discussions of the day:

1. Shared knowledge plays a crucial role for transformation towards sustainable societies. While we have made remarkable progress in knowledge sharing in international cooperation, there is a striking deficit in joint knowledge creation, which is key to identifying adequate solutions and initiating collective action.

2. Our incentive systems in development policy and in science are unfavourable for promoting joint research between actors from industrialised, emerging and developing countries. This contributes to perpetuate the epistemological marginalisation of the global South and the systematic negligence of indigenous knowledge.

3. Making knowledge work is imperative for the achievement of the SDGs. We need to further develop our technical approaches into transformative learning and research by including new ways of thinking and working together in a transgressive and transdisciplinary way.

What does sustainability mean for higher education & science and how can it be ensured?

Sustainability in higher education and science means to address the topics of SDG 1-16 while at the same time building capacities for transformative learning and research as a basis for global partnerships (SDG 17). Specific meaning of sustainability is revealed only in concrete context. Thus, local actors have to be involved in defining research priorities and searching for applicable solutions.

Interesting examples are the GAMP concentrating on water, energy, economics, education and urban development; the SDG Graduate School cooperation project of the University of Witwatersrand and TU Berlin in urban development as well as the NoPa Programme in Brazil concentrating on tropical forests, renewable energies and energy efficiency.

How can scientific research help to generate findings of relevance to the sustainable transformation of our society? How can we make better use of these findings?

Research needs to include relevant actors from civil society and private sector, and respond to questions in a contextualised way to produce impact in real life.

Multi-stakeholder approaches make research more relevant and applicable. Transdisciplinary approaches are crucial as any technical challenge is socially embedded and any change in production and consumption based on decisions of many individual and collective actors.

Which kind of partnerships and communication structures are key to this process? Who learns from whom and what do they learn? Between South and North, with stakeholders from politics, society and business, and from the development cooperation arena.

In regards to North-South relationships, power structures in terms of what is considered to be relevant research practices and financial implications need to be reconsidered. A decolonisation of research is needed and different epistemologies are to be considered. The North may appreciate learning from and with the South by cooperating with researchers and higher education institutions from different countries. Fostering research networks with members from diverse socio-ecological contexts may become one asset of German development cooperation.

Dr Ingrid Jung
The NoPa initiative emerged from German-Brazilian development cooperation provides an interesting model for such a multi-stakeholder and problem solving oriented partnership approach. A careful adaptation to other regions of the world and different research areas might create similar positive results. However, in some contexts such as in parts of Sub-Saharan Africa, development cooperation might be requested to focus on strengthening capacities of research institutions, while implementing joint contextualised and transdisciplinary research, education and application activities.

**What kind of higher education do we need to train qualified and responsible decision-makers, experts and scientists?**

International settings and cross-sectoral approaches do have implications on the teaching and learning processes in higher education and therefore on the role of teachers. Current education and research structures are very much limited by requirements of the particular disciplines. Lectures and researchers request international experience and greater flexibility in terms of collaboration and recognition to realise different ways of teaching and learning.

**How does the higher education and research sector need to proceed in order to fulfil these tasks? What good practices exist? What kind of resources and incentives are needed to support this development?**

The higher education and research sector needs to contribute to and lobby for further funds for SDGs research in international settings. Publicly funded international research projects should respond to the 2030 Agenda. Criteria for research projects need to be reviewed and adverse mechanisms in the scientific landscape counteracted. Possibilities for publishing of research from the South with a focus on SDGs need to be created and relevant research reports already published in the South recognized when awarding scholarships. International development cooperation in higher education and research has to step up beyond 3-year project cycles and commit to long-term efforts. Support for network activities of alumni and researchers should be included in long-term strategies.

A range of good practices in German development cooperation exist: bilateral higher education cooperation programmes (DAAD); research funds enhancing the dialogue between scientists, practitioners and users on priority areas for development (NoPa); technical cooperation projects to strengthen higher education institutions; international multi-stakeholder networks (ESD ExpertNet); regional higher education and research projects (examples shared by Heila Lotz-Sisitka); regional intercultural study programmes (Indigenous Intercultural University Latin America).

**Day 2** focused particularly on the role of higher education and science in achieving SDG 4. In his keynote, Prof Dr Dilvo Ristoff convincingly illustrated that investing in expansion and inclusion programmes in higher education does not mean to automatically endanger progress made in terms of quality. Experiences from Brazil over a time span of more than 15 years unmasked the wide spread fear as a myth.

Representing the voice of the AU, Beatrice Njenga addressed the lacking cooperation amongst donors and the need for eye-level partnerships between development cooperation and African institutions.

**How can we ensure quality and relevance in higher education while at the same time expanding equal access and inclusion?**

There need to be clear long-term policies on higher education organisational and financial settings. To ensure quality and relevancy, we need quality assurance mechanisms and good institution management. The definition of research priorities and relevant qualifications must be context specific and include stakeholders from outside the higher education system.

Inclusion strategies must be based on a clear identification of the target groups, their specific background and needs. Support structures need to be tailored to reach those specific target groups and to enable students to do well in their studies. We should make use of the potentials of digitalisation such as open universities.

**How do we ensure that an increased number of scholarships for least developed countries have an impact on sustainable development?**

There is an increasing number of scholarships for individuals from LDCs but little coordination between different schemes and no clear focus on SDG relevant topics yet. To ensure that scholarships have an impact on sustainable development, funding partners need to align their efforts with the partner countries’ sustainability strategies and their higher education institutions’ research policies.

**How do we finance higher education systems facing the challenges of quality and broader access? What mix of financial instruments is appropriate (public and private, North and South)?**

In terms of financial sustainability, particularly facing the challenges of quality and broader access, development cooperation can start by supporting lighthouses as examples. It was also brought forward to diversify the higher education institutions (teaching and/or research, public and private), as in the case of Brazil. Thereby, the costs of higher education at the level of technical training or bachelor degree are reduced in comparison to the costly research institutions, which are necessary for advanced studies and the development of a country’s higher education capabilities to face the challenges of the 2030 Agenda.
CONCLUDING REMARKS
FROM THE PLENARY (FISHBOWL)

Experts sharing their main outcomes

The Fishbowl session provided participants with the opportunity to state their own remarks regarding the discussions and results of the expert meeting and the role of higher education and science in achieving the SDGs.

Five chairs were arranged in an inner circle – the Fishbowl. The remaining chairs were arranged in concentric circles outside the Fishbowl. Participants were invited to in turns – fill the Fishbowl to share their impressions on the discussions over the one and a half days, while the rest of the group listened in.

*Dr Piyushi Kotecha* addressed the nexus between access, funding and equity, where there is a lot to learn from one another. Furthermore, looking at climate change for example, universities need to jointly formulate strategic goals for research, as is the case with the Programme for Climate Change Capacity Development (PCCCD) of SARUA (see first example of Heila Lotz-Sisitka’s keynote). More case studies in international cooperation are needed in terms of transformation. There were interesting discussions throughout the meeting that should be continued.

*Prof Dr Anton Mangstl* called for follow-up processes to the SDGs. Universities need to conduct research that is demand driven rather than supply driven. In order to achieve the SDGs we need to operationalise research demands resulting thereof rather than determine what is relevant research.

*Dr Beatrice Khamati Njenga* commended the higher education community for addressing the SDGs, particularly as higher education and research have not been directed before. Moreover, she brought forward the Pan African University (PAU) as an example showing a good partnership process. The programme derived from the AU vision and the AU education strategy with partners, such as Germany, joining in to support. The PAU addresses many of the issues that were discussed at this meeting, such as quality and gender.

*Maren Kröger* stated that there are follow-up processes on the SDGs. There are regional forums on how to implement SDG 4 and follow-up processes on these forums in national education sectors. The SDGs overall go a step beyond the MDGs by including primary, secondary and tertiary education. It is key to bring together these different levels and realise the vision of life-long learning. She encouraged participants to get in touch with UNESCO in their respective countries and take part in the education forums.

*Prof Dr Tsige Gebre-Mariam* stressed that the 2030 Agenda is to be implemented within local settings. Thus, there is the need to think globally and act locally. Global citizenship is a principle that we need to internalise as the problems we are facing are common problems. When we talk about quality in higher education, it is also about quality research and quality community outreach. We need to train the trainers and make the teaching profession more appealing. Every country has resources which we must exploit and share by forming partnerships. We need to convince local governments and organisations such as the AU that more resources should be invested in education.

*Prof Dr Phillip Clay* professed that forums on transformation processes are a passion of his. He often explores improbable scenarios with his students to foster innovative thinking for transformative change. He left the audience with a question he discussed earlier in an OS session: “If someone gave you 1 billion dollars and ten years for East Africa, what would you do?”

*Christoph Hansert* addressed two challenges in particular that he has taken from the discussions led in the meeting. The first is impact measurement on the macro level and the ability of partner countries to provide the necessary data. Brazil has strong statistical institutions, but do these exist in Africa? Strengthening such institutions is a key to impact measurement. The second is the lack of financing for joint knowledge creation. The DAAD would be happy to partner in a venture to find suitable funding models.

*Dr Ingrid Jung* highlighted that an education system can only sustain itself, if it has a research component. Quality education is not only about improving higher education or teachers’ training, but also about educational research. Institutions need to be strengthened to be able to conduct educational research and only then a country can ensure quality education.
Closing remarks were given by Dr Michael Holländer, Team Leader Sector Program Education, GIZ. On behalf of the BMZ and the organising committee, he thanked all participants for their active and valuable contributions. It is remarkable that almost half of the audience was engaged in the preparation of this event, which made it possible to raise the right questions and set the right tone. However, this is not all: The active implementation of all components of the programme even extended to the creation of new topics for the open space sessions. This is an indicator for the high relevance of the questions discussed throughout the two days. Therefore, special thanks went to all individuals and organisations who contributed to make this event successful.

He further referred to a conference on higher education and science in context of the achievement of the MDGs held in 2004. While preparing this expert meeting and collecting guiding key questions, the core organising team was surprised to find out that the questions were indeed similar to what was asked thirteen years ago. Hence, it was a wish to go a step further in formulating more concrete answers to those questions. With this expert meeting we have achieved this goal. What now counts is to follow-up on the given ideas, insights and recommendations.