



# Agenda 2030

SDGs in GIZ Higher Education and Science Programmes

## SUSTAINABLE DEVELOPMENT GOALS





# Agenda 2030

## SDGs in GIZ Higher Education and Science Programmes

Competence Center for Education, TVET, Labour Markets

March 2017



## Structure of the presentation

- 1. Agenda 2030 and SDGs**
2. HE & Science in the context of the Agenda 2030
3. HE & Science in development cooperation
4. Approaches in GIZ programmes
5. Examples of GIZ programmes
6. Key challenges
7. Open questions
8. Contacts



## Agenda 2030 and SDGs (1)

- Background
  - Merging strands of development dialogues (MDG, Rio Process)
  - Long and broad consultative process on global development goals
  - Resolution adopted by UN General Assembly (2015)
- Purpose
  - Setting a global agenda for sustainable development
  - Jointly embark on new paths of transformation
  - 17 global goals and 169 targets to be achieved by 2030



## Agenda 2030 and SDGs (2)

### Main policy papers and mechanisms

Transforming our  
World: the 2030  
Agenda for  
Sustainable  
Development

#### Education 2030 Incheon Declaration and Framework for Action

- Towards inclusive and equitable quality education and life long learning for all

Addis Ababa  
Action Agenda  
(AAAA)

#### Technological Facilitation Mechanism (TFM)

- Promote multi-stakeholder partnerships for research, innovation and technology transfer
- Multi-stakeholder Forum on Science, Technology and Innovation for SDGs (STI Forum)



# Agenda 2030 and SDGs (3)

## 17 Sustainable Development Goals

<b>1</b>	<b>End poverty in all its forms everywhere</b>
<b>2</b>	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
<b>3</b>	Ensure healthy lives and promote well-being for all at all ages
<b>4</b>	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
<b>5</b>	Achieve gender equality and empower all women and girls
<b>6</b>	Ensure availability and sustainable management of water and sanitation for all
<b>7</b>	Ensure access to affordable, reliable, sustainable and modern energy for all
<b>8</b>	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
<b>9</b>	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

<b>10</b>	<b>Reduce inequality within and among countries</b>
<b>11</b>	Make cities and human settlements inclusive, safe, resilient and sustainable
<b>12</b>	Ensure sustainable consumption and production patterns
<b>13</b>	Take urgent action to combat climate change and its impacts
<b>14</b>	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
<b>15</b>	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
<b>16</b>	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels
<b>17</b>	Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development



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## The Role of Higher Education in the Agenda 2030

- HE pronounced as engine for socio-economic development
- HE recognised as key lever for transformation
- HE as public good and means for attaining gender equality
- **Higher education is crucial to achieving SDG 4**
  - Equal access to affordable quality tertiary education (4.3)
  - Increasing access in global South (4b)
  - Teacher education, as a means to an end 4 c (long-term impact)
- **Higher education as means to an end**
- Great potential for capacity development for achievement of SDGs (cross-cutting instrument)





## Higher Education in the Framework for Action

**Tertiary Education and universities are critical for the education of future scientists, experts and leaders. Through their research functions, they play a fundamental role in creating knowledge and underpin the development of analytical and creative capacities that enable solutions to be found for local and global problems in all fields of sustainable development. (FfA, p. 13)**

- Holistic view on HE
  - Incorporating the International Standard Classification of Education (ISCED)
  - Ranging ISCED level 5 (short cycle tertiary education) to ISCED level 8 (doctorate or equivalent)
- Need for substantial increase HE enrolment rate in the global South
- Highlighting new formats of HE at the intersection to TVET
- Ensuring a smooth transition from HE to the labour market



# Role of Science, Technology Transfer & Innovation (STI)

## *Integrated Approach to Development: STI at the Core*

- STI explicitly highlighted in several goals (Target or Means of Implementation)
- STI capacity development in and through HEIs is vital for achievement of goals

Sustainable agriculture & food security (Mol 2.a )

Health (Mol 3.b )

Renewable energies (Mol 7.a )

Innovation and infrastructure (Target 9.5 )

Climate change mitigation (Target 13.3 )

Oceans and marine resources (Mol 14.a )

Partnerships & access to STI & knowledge sharing (Target 17.6)

Science, technology and innovation features strongly in SDG 17



Mol 2.a



Target 9.5



Mol 3.b



Target 13.3



Mol 7.a



Mol 14.a





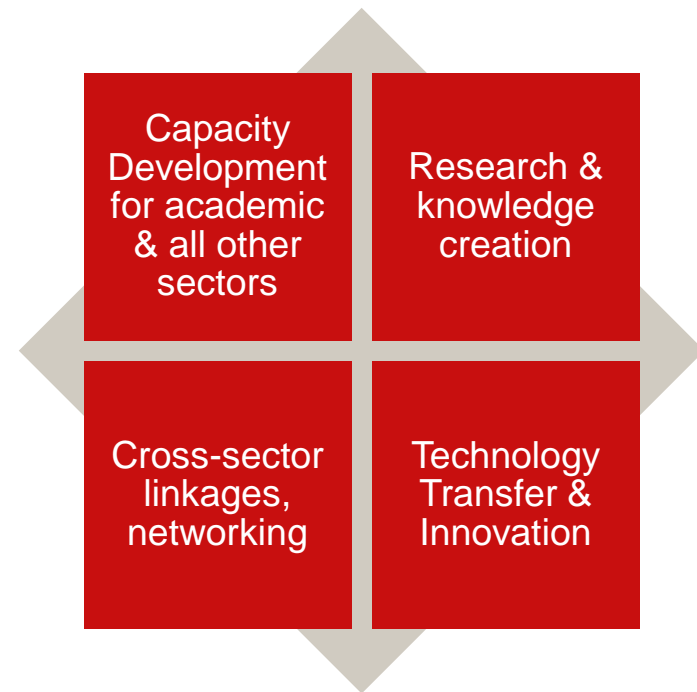
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# HE & Science in Development Cooperation

## Structures, policies, capacities for sustainable development

- Forstering employability, employment & entrepreneurship
- Contributing to socio-economic development in healthy environment
- Embedding HE, STI and Dev. Coop. into cooperation networks
- Conveying values & creating open mind-sets for transformative HE&STI





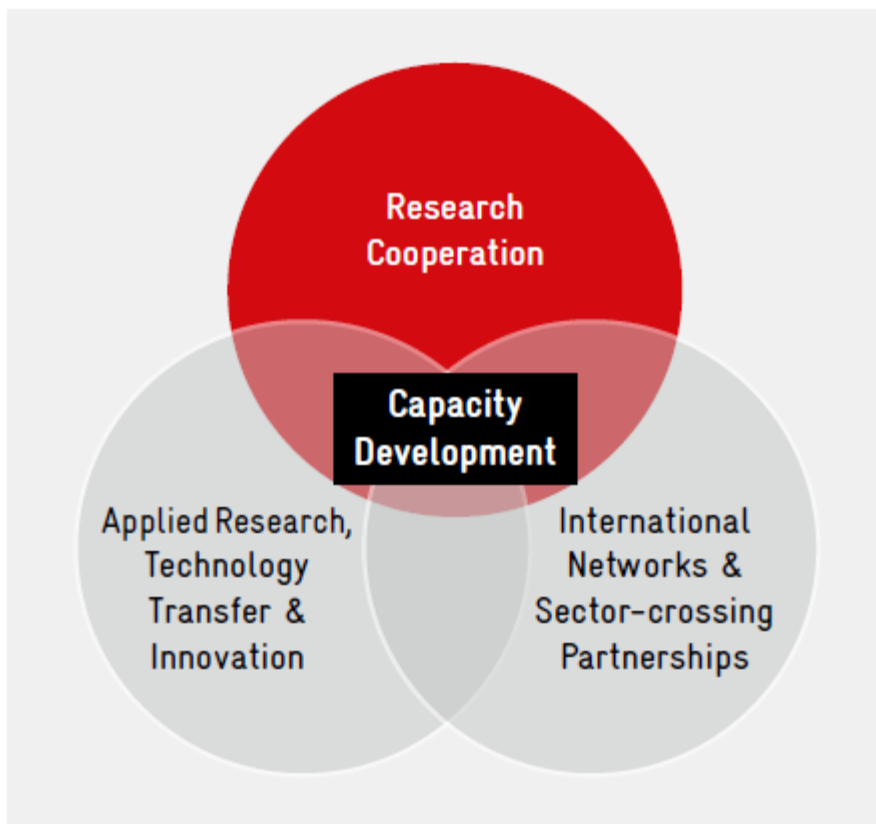
# HE & Science in Development Cooperation

## Strengthening and capacitating for sustainable development

- **Capacity development**
  - qualified and skilled work force for all sectors (incl. academic sector)
  - leaders and change agents for transformation, conveying values
- **Strengthening structures**
  - Governmental structures, coordinating bodies, agencies
- **Enhancing quality and relevance** of teaching, learning and research
  - Competence-based and learning outcomes oriented curricula
  - Practice-oriented dual approaches enhancing employability
- **Supporting cooperation**
  - Networking (academic and cross-sector), linkages to private sector development, technology transfer & entrepreneurship
  - Strengthening sector-crossing, integrated key sector reform



## HE & Science in Development Cooperation



- Embedded in or linked to technical cooperation projects
- Linked to innovation, entrepreneurship & employment
- Capacity development for sustainable development
  - Academic sector
  - All other key sectors
- Cooperative knowledge generation and knowledge sharing
- International and regional (cross-sectoral) networking



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## Approaches in GIZ Programmes

### Approach

**Support to System and Sector Reforms**

**Development of study programmes and establishment of academic institutions in key sectors**

**Application-oriented research and technology transfer**

**Digital formats of higher education and research**

**Higher Education Networks**

**Cooperation with the economy and entrepreneurship education**

**Higher Education in Emergencies**

### Programmes

- Pan African University, (former) Engineering Capacity Building Programme

- German Mongolian Institute of Resources & Technology
- Renewable Energies, Senegal , Sustainable Energies and Climate Change, Caribbean Region, Mining Education Afghanistan, Transport Namibia

- New Partnerships Brazil, Green Innovation Centers,
- Advisory Service on Agricultural Research for Development Research cooperation in Biodiversity/ Climate Change Ecuador, Fit for School

- Indigenous intercultural University, Executive Master Peace and Security Management, Global Partners of Germany - Alumni Network (University center for ICT and digital education East Africa)

- Support to CGIAR – Consultative Group on International Agricultural Research, Bangladesh German University Network for Sustainable Textiles. Health Networks in Africa

- German Arab Bi-cultural Master Programme, Higher Education for Renewable Energy and Energy Efficiency, Sustainable Energies and Climate Change

- New Perspectives through Academic Education and Training for Young Syrians and Jordanians



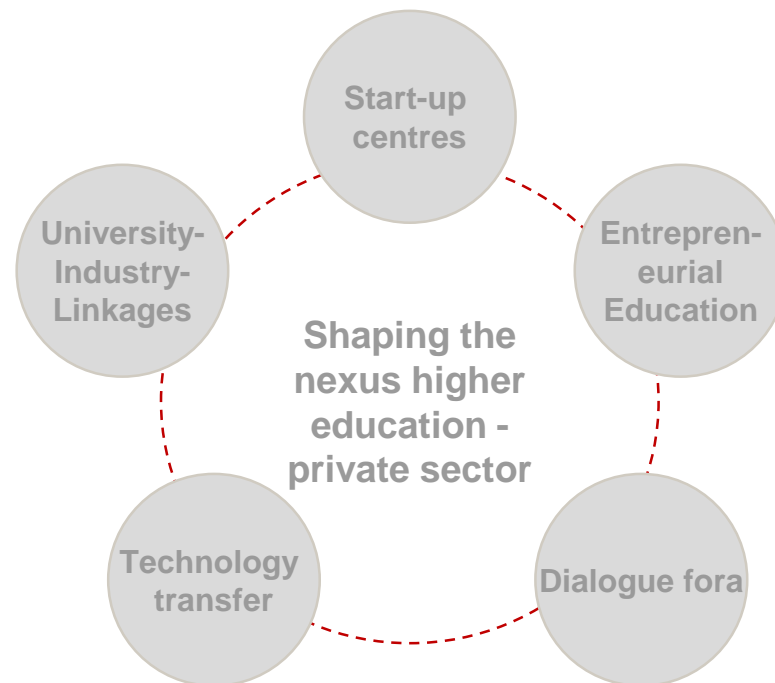
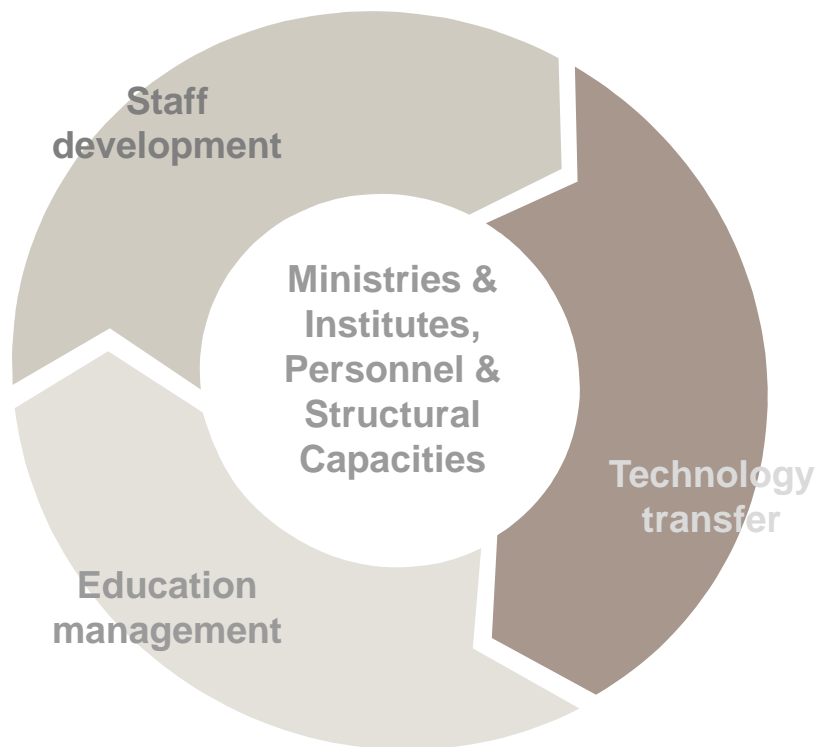


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## Ethiopia: Capacity Development in Higher Education

Labour market and employment-oriented higher education sector reform





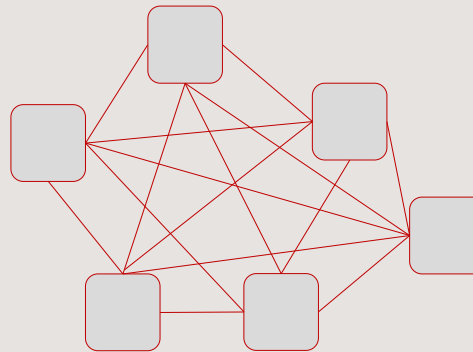
## **Indigenous Intercultural University: A Network of 25 Local Universities in 11 Countries in Latin America and the Caribbean**

**Strengthening governance and  
institutional capacities**

**Quality assurance of academic  
programmes**

**Development of sustainable  
funding mechanisms**

### **Indigenous Intercultural University (IIU)**



**Eight  
postgraduate  
study  
programmes for  
indigenous  
students**

**Nurturing higher education reform processes  
in the region**





## German-Arab bi-cultural Master programmes for Capacity Development in the MENA Region

Relevant to  
development

Intercultural

Interdisciplinary

Application-  
oriented

University of Jordan, Jordan  
Fachhochschule Köln

Integrated  
Water  
Resources  
Management

Economics of  
the Middle East

Damascus University, Syria  
Philipps-Universität Marburg

Helwan University, Egypt  
Päd. Hochschule Ludwigsburg

Renewable  
Energy and  
Energy  
Efficiency for  
the MENA  
Region

International  
Education  
Management

University of Cairo, Egypt  
Universität Kassel





## ***New Partnerships and Innovation for Sustainable Development (NoPa)***

Promoting applied research through bilateral cooperation and networking with private and public sector

**NoPa**

**Private Sector,  
Public Sector, Civil  
Society (Brazil)**

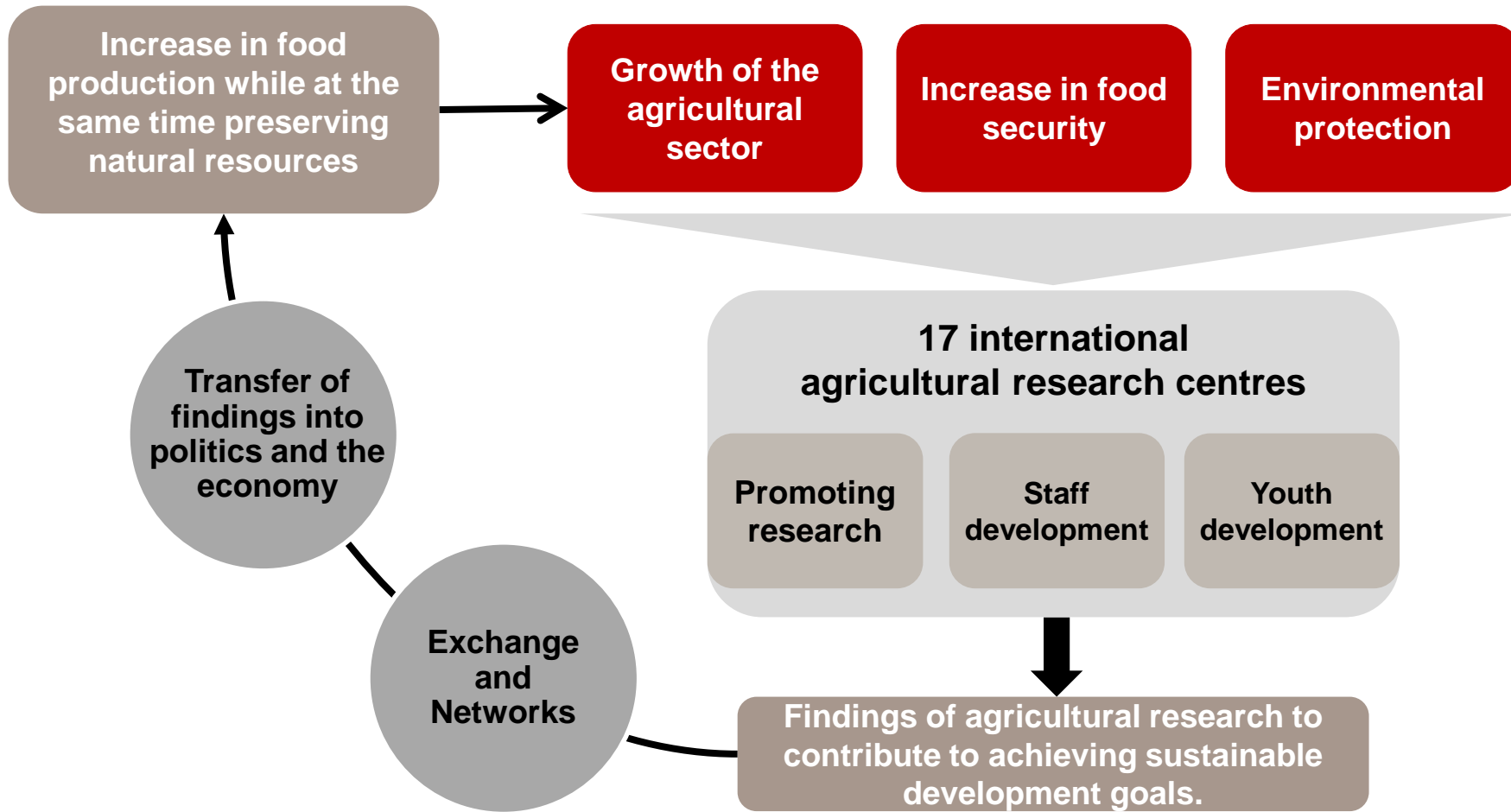
**Brazilian  
Universities**

**German  
Universities**



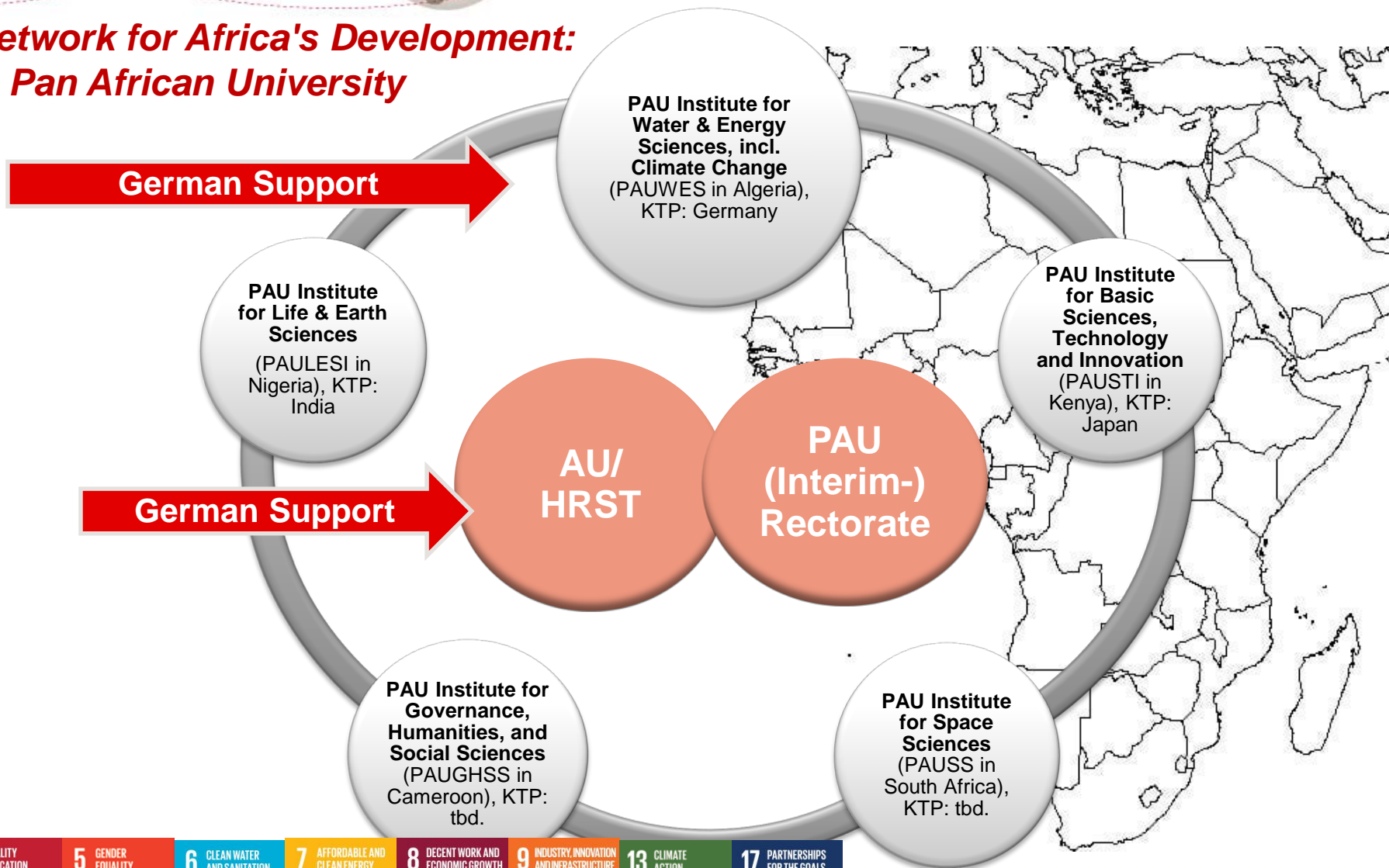


## Advisory Service on Agricultural Research for Development (BEAF)





## A Network for Africa's Development: The Pan African University





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# Key Challenges and Open Questions

- Generating a critical mass of qualified graduates to lead transformation, provision of practice experiences, Linking economic interventions with capacity development in HE & STI

**1**

**Employability & Entrepreneurship**

- Securing funding for HE infrastructure (incl. ICT)
- Securing scholarships, supportive frameworks
- Global HE & STI Fund for capacity development?

**2**

**Financing expansion and quality**

- Increasing access, improving equity
- HE as public and affordable good
- Commercialisation as risk for HE for sustainable development

**3**

**Public versus private good**

- Enabling policies and frameworks for change of mindsets
- Promoting a culture of knowledge production, knowledge sharing and networking

**4**

**Knowledge sharing versus IPR**

- Enabling policies and frameworks for change of mindsets
- Capacity development of academic staff
- Values & principles in teaching and learning

**5**

**Conveying values & principles**



# Core Challenges for Development Cooperation

<b>1</b>	<b>Impact</b>	<ul style="list-style-type: none"><li>• Ensuring impact, lobbying for long-term planning &amp; investment in HE &amp; STI, long-term perspective for capacity development</li></ul>
<b>2</b>	<b>Prioritisation</b>	<ul style="list-style-type: none"><li>• Disparity in prioritisation of sectors between the organisation &amp; partner countries</li></ul>
<b>3</b>	<b>Coordination &amp; Governance</b>	<ul style="list-style-type: none"><li>• Enhancing coordination (within the organization, within ministries and with partners), governance of multi-stakeholder partnerships</li></ul>
<b>4</b>	<b>Policy Coherence &amp; synchronisation</b>	<ul style="list-style-type: none"><li>• Ensuring policy coherence &amp; programmes concerned, synergising complementarity &amp; synchronisation of technical and financial cooperation</li></ul>
<b>5</b>	<b>Harmonisation</b>	<ul style="list-style-type: none"><li>• Enhancing donor harmonisation, harmonisation of frameworks &amp; policies</li></ul>
<b>6</b>	<b>Monitoring</b>	<ul style="list-style-type: none"><li>• Capacity development for SDG Monitoring</li></ul>



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# Outlook

## Systemic approach to sustainable capacity development

- Higher Education and STI play a central role in achieving the goals and targets
- Academic capacity development (knowledge, skills & competences) needed for achievement of all goals
- Leverage of sustainability by integrated sector-crossing approaches with HE & STI as component in key sector development
- Strengthening science, technology, engineering and mathematics education (STEM)
- Exploring potential to strengthen employability by linkage of dual approaches HE, STI & TVET and private sector

## Partnerships

HE & STI policies for sustainable development are key transformational forces in changing existing pathways globally; It should become a vital ingredient of development cooperation  
Establishment of sound partnerships between the development cooperation with private sector, higher education and STI backed by civil society enhances employment and entrepreneurship and contributes to sustainability  
Cooperation & knowledge sharing, North-South, South-South and triangular regional and international cooperation on mutually agreed terms, development cooperation as broker

## Values and principles

- Higher Education is a goal and a means to an end
- Universities and research institutions bear a potential to educate for global citizenship and to convey values and principles in the spirit of the Agenda 2030



## Agenda 2030: a new vision for (higher) education

- Our vision is to transform lives through education, recognising the important role of education as a main driver of development and in achieving the other proposed SDGs. UNESCO et al. (2015). Framework for Action, p. iii
- Promising model: Synergistic collaboration of development cooperation with higher education on the one hand and research and innovation actors on the other hand in building capacities for sustainable development in general and for science, technology and innovation in particular.



## Contacts

### **Gert Flaig**

Group Leader, Competence Center Education, TVET, Labour Markets

gert.flaig@giz.de

### **Heike Haug**

Senior Advisor Higher Education and Science

heike.haug@giz.de

### **Dr. Karola Hahn**

Advisor Higher Education and Science

karola.hahn@giz.de

### **Heike Knoop**

Advisor Higher Education and Science

heike.knoop@giz.de