



Deutscher Akademischer Austauschdienst
German Academic Exchange Service



Promoting climate action worldwide

DAAD programmes, activities and impacts 2022



Promoting climate action worldwide

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One of the core concerns of the 2030 Agenda, which was adopted by the UN in 2015, is to protect our planet and ensure it remains a good home for generations now and in the future. The 2030 Agenda dedicates five core *Sustainable Development Goals* (SDGs) to protecting the climate and natural resources. These describe their guiding principle as living in harmony with nature and the natural renewal of resources.

International academic cooperation has a key role to play in studying climate change and overcoming the climate crisis. This undertaking can only succeed if based on cross-border partnerships, and this is where the DAAD comes in. Through its portfolio, it supports individuals and institutions across academic disciplines and national borders – always aiming for synergies between **academia, politics and society**.

The DAAD funding activities aspire to the following goals:

- expanding **knowledge of the climate** and climate change, with a particular focus on raising awareness around the issue among early-career academics,
- strengthening **climate research**, and
- promoting the **transfer** and use of learning in society and politics.



Promoting knowledge acquisition



Developing teaching materials and approaches for sustainable climate and environment education

One core goal of the 2030 Agenda is to foster **forward-looking thinking** and actions. The DAAD's programmes are making an essential contribution towards this, starting in university lecture halls: The students reached by its funding programmes today will be the **multipliers of tomorrow**. Equipped with a keen awareness of environmental issues, these students can go on to influence future decisions and sustainable processes in politics, business and society. Doing this requires developing teaching and learning materials and methods which are focused on sustainability. The key elements in this are:

- designing **curricula**,
- developing interdisciplinary **skills**, and
- **networking** with international partners for collaborative **teaching**.

EXAMPLES FROM PRACTICE

Networking is a priority for the “**Global Centres for Climate and Environment**” programme (funded by the German Federal Foreign Office, AA), which sets up international centres at higher education institutions in the Global South, where German and international scientists collaborate on research and co-teach courses on topics such as water security, land management and ecosystem protection. Exemplary outcomes include the development of new joint master's degree courses and graduate schools. The Global Centres are: the ► *Global Water and Climate Adaptation Centre (ABCD-Centre)*, the ► *African Climate and Environment Centre - Future African Savannas (AFAS)*, the ► *Regional Centre for Sustainable Adaptation to Global Change in the Middle East (SAGE-Centre)*, and the ► *Transnational Centre for Just Transitions in Energy, Climate and Sustainability (TRAJECTS)*.

AA

Through the creation of “**Centres of African Excellence**”, African higher education institutions are improving the quality of their teaching and, amongst other things, expanding their research capacities so they can educate future decision-makers in line with international standards. Three of the twelve centres are developing teaching and learning programmes on the topics of climate and the environment. These are the ► *Ghanaian-German Centre for Development Studies (GGCDS)*, the ► *West African German Centre for Sustainable Rural Transformation (WAC-SRT)* and the ► *Promoting Academic Capacities for Sustainable Agricultural Resources Use in West Africa (Pro-RUWA)* project.

Erasmus+ funding lines such as “**Cooperation Partnerships**” and “**Capacity Building**” are promoting a range of projects that aim to boost teaching and research related to the climate. One example is the ► *Locally organized transition of urban sustainable spaces (LOTUS)* project¹, which has constructed an interdisciplinary teaching model for sustainable urban planning and development through educational role-play.

EU

BMBF

The “**Transnational Education (TNE) courses**” (funded by the German Federal Ministry of Education and Research, BMBF) scheme for German higher education institutions abroad supports German and foreign higher education institutions and offers study modules and programmes, including courses in the field of climate and the environment. For example, one long-term goal of the ► *Integrated Water Resources Management with focus on Latin America and the Caribbean* master’s degree programme is to establish itself as a highly-qualified programme which teaches key skills alongside subject-specific knowledge. The programme employs elements of blended learning and offers students the opportunity to earn a double degree. Other examples include the bachelor’s degree programme in ► *Energy and Environmental Technology* and master’s degree programmes in ► *Integrated Water Resources Management* and ► *Strategic Management of Renewable Energy and Energy Efficiency* at the “**Kazakh-German University**”.

“**SDG Partnerships**” (funded by the German Federal Ministry for Economic Cooperation and Development, BMZ) promote higher education partnerships in fields relevant to SDGs. These will contribute to sustainable development in line with the SDGs, and support the development of high-performing and cosmopolitan higher education institutions in Germany and the partner countries. One example of these is the project ► *Promoting Himalayan Development by Strengthening Teaching and Research on Sustainable Development Goals (ForHimSDG)* that is run by the Potsdam Institute for Climate Impact Research in collaboration with local stakeholders. The project aims to develop courses on sustainable development in the mountain regions and to transfer these to further higher education institutions.

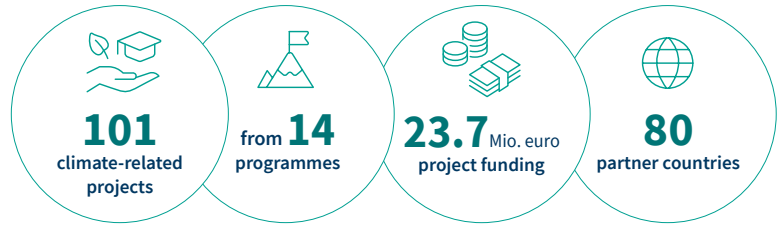
BMZ

The programme “**Subject-Related Partnerships with Institutions of Higher Education in Developing Countries**” has brought together the University of Duisburg-Essen and partners in Egypt to collaborate on developing the ► *Egyptian-German Academic Excellence in Water Treatment and Desalination* education programme. As part of the project ► *developing curricula for climate-resilient urban renewal*, the University of Kassel works with its Cuban partner university Universidad Central “Marta Abreu” de Las Villas. The institutions are jointly developing a ‘Diplomado’, which is intended as a tool to expand the subject-specific skills needed for sustainable urban renewal when dealing with the impact of climate change.

The “**Development-Related Postgraduate Courses**” (EPOS) programme helps professionals and managerial staff gain additional skills in subject areas relevant to development in postgraduate programmes at German higher education institutions. The programme allows skilled workers from developing and emerging countries who already have career experience to gain additional qualifications at a high academic level and achieve an internationally recognised master’s degree. Of the 39 selected postgraduate programmes, 15 are in the field of climate and the environment.

IMPACTS AND OUTCOMES 2020/2021²

Funded cooperation projects related to climate



139 climate-related teaching and study courses have been set up or developed



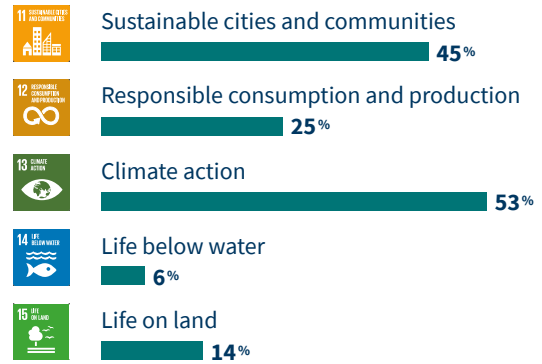
3,987 people were trained within the framework of climate-related projects.

Scholarships related to climate



921 scholarship holders link their academic visits and research or study plans to an SDG linked to climate and environment. This corresponds to **15** per cent of the respondents. **50%** of them are female.

Priority areas

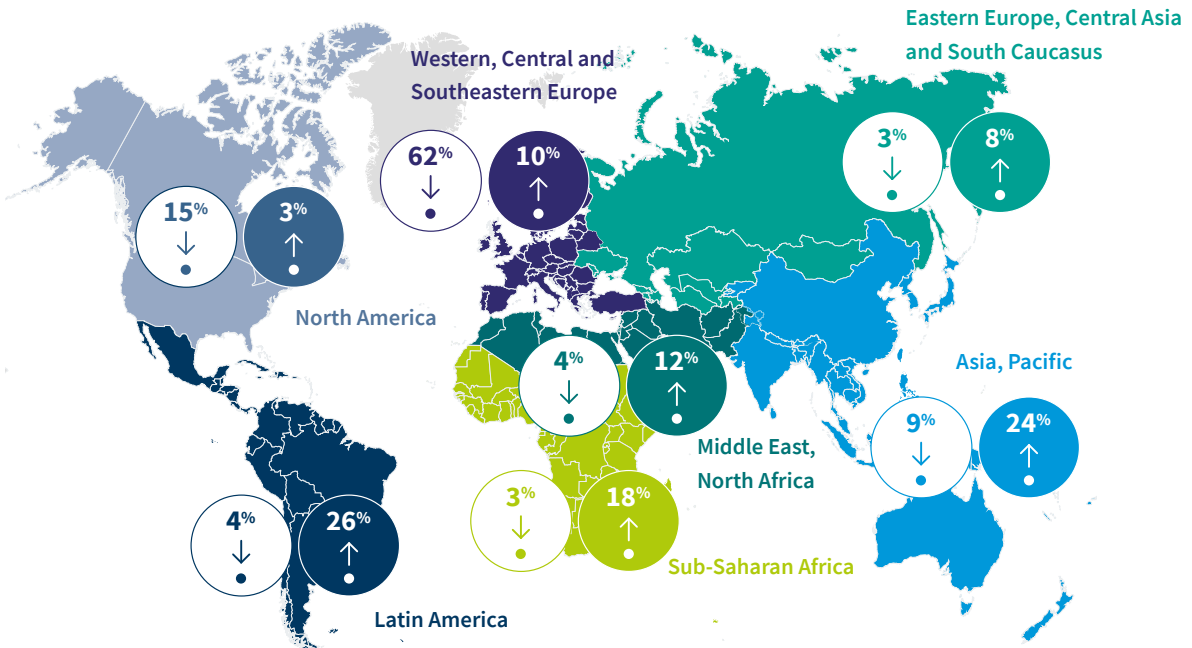


Destination countries

for scholarship holders from Germany
Top 5
UK, USA, Sweden, Netherlands, France

Countries of origin

for scholarship holders from abroad
Top 5
Colombia, India, Pakistan, Nigeria, Brazil



² All data on Impacts and Outcomes relate to 2020 and 2021. This analysis considers programmes for funding higher education cooperation and scholarship programmes. For further information, please see www.daad.de/en/factsheets

Boosting climate research



Building robust foundations

Fighting climate change and other threats to the environment demands that scientists, politicians and society take highly complex decisions. These decisions should be based on the results of scientific research which reflect the complexity of the contexts involved. This calls for modern research that crosses disciplinary and national borders, along with a stimulating research environment with its associated infrastructure and methodological expertise.

Several DAAD funding programmes are helping to create the institutional structures needed for climate research and to forge effective links between international research activities. The DAAD is also providing direct support to the next generation of academics and scientists. It aims to:

- Introduce students to **research work** in particularly relevant disciplines,
- boost the **research skills** of aspiring academics and researchers, and
- support their **careers in academia**.

EXAMPLES FROM PRACTICE

AA

The German-Columbian ► *Corporation Center of Excellence in Marine Science* is one of five “**Centres of Excellence in Research and Teaching**”. It aims to promote interdisciplinary research and teaching in marine sciences and other areas, as well as encouraging academic exchange, with the goal of helping protect the oceans and campaigning for their sustainable use. The centre brings together interdisciplinary marine research, postgraduate teaching and international networks across various disciplines in the natural and social sciences. One effective instrument for achieving this goal is the International Conference on Marine Science (ICMS), which is held every two years.

BMBF

The “**ERA Fellowships - Green Hydrogen**” scholarship programme supports the implementation of the Strategic Research and Innovation Agenda (SRIA) of the “European Agenda Process on Green Hydrogen”. The programme funds teaching and research for early-career academics and researchers in fields related to green hydrogen at higher education and research institutions in Germany and across the wider European Research Area (ERA). It also supports the integration of early career researchers in and the expansion of international expert networks. A key focus of this are the programme’s four working groups on key topics in the agenda process: manufacturing, transport and infrastructure, market stimulation, and cross-cutting issues.

The application-oriented “**Climate Research Alumni and Postdocs in Africa**” (**climapAfrica**) scheme funds the next generation of academics and researchers in southern and western Africa through post-doctoral research projects, providing a platform for collaboration through thematic working groups. A network of 40 African climate researchers has developed out of the programme, who are working together to implement measures to improve working and living conditions for climate scientists in Africa.

The **“Make Our Planet Great Again – German Research Initiative” (MOPGA-GRI)** funded outstanding research projects at German higher education and research institutions across three clusters in the fields of climate, energy and earth systems research.³

BMBF

Scholarships from the **“Capacity Building/Development” (CaBuDe)** programme allow African and German early-career academics to undertake short research visits. CaBuDe also facilitates binational supervision of PhDs and further professional development, along with holding summer and winter schools in Germany and Southern Africa. It is aimed at Bachelor, Master and PhD students who are involved in projects associated with the overarching **“Science Partnerships for the Adaptation to Complex Earth System Processes in the Region of Southern Africa II” (SPACES II)** programme, and who are working in environmental, earth, coastal and marine sciences.

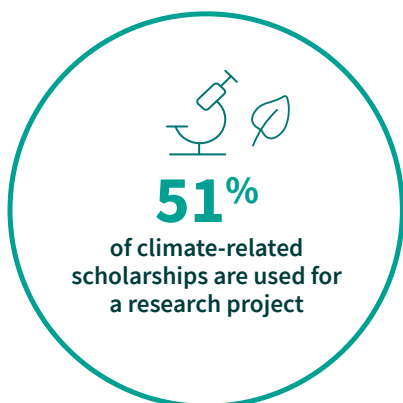
Through the **“A New Passage to India” (ANPtI)** programme, the ► *Indo-German Center for Sustainability* conducts teaching and research in fields relevant to the climate. The **“German-Indian Partnerships” (DIP)** and **“German-Indian Higher Education Cooperation” (DIHSK)** programme lines fund nine projects. These are conducting research into topics such as threats to nature, groundwater resilience and pollution and training the next generation of academics and researchers.

BMZ

Training PhD students and postdocs in climate and environmental research forms a key focus of two **“SDG Graduate Schools”**: ► *Climate Change Effects on Food Security (CLIFOOD)* and ► *Rostock-Hanoi SDG Graduate School (RoHan Catalysis)*. The German-Ethiopian and German-Vietnamese graduate schools are each developing their own programmes aimed at empowering early-career academics to find solutions for food security and to develop key chemical processes for sustainable resource management.

3 The Make Our Planet Great Again – German Research Initiative (MOPGA-GRI) concluded in 2022.

RESULTS AND IMPACTS 2020/2021



87% of climate-related scholarship holders state, after their stay, that they have gained access to new research topics.



Over **51%** of climate-related alumni and alumnae continued their academic cooperation with their host institution after their funding.

Putting climate knowledge to use



Sharing and implementing research results

The transfer of research-based expertise is of vital importance for the fight against climate change. On the one hand, this involves making the latest research evidence available to the wider public. On the other hand, this evidence must be put to use in cooperation with businesses and policymakers. Sharing ideas in this way beyond the academic community makes it possible to drive the development of new technologies and prompt regulatory changes.

Through its funding programmes, the DAAD is helping to share climate expertise through channels such as networks, conferences, academic publications, and training courses. Its funding focuses on topics such as biodiversity in countries in the Global South, the use of chemical catalysis as a key process in a range of climate questions, testing new energy concepts in cities, and developing a database for innovative thermo-dynamic heat storage.

EXAMPLES FROM PRACTICE – TRANSFER

EU

The “**Erasmus+ Strategic Partnership**” on ► *Sustainable Fashion Curriculum at Textile Universities in Europe – Development, Implementation and Evaluation of a Teaching Module for Educators (Fashion DIET)* is developing new tools to boost key skills among lecturers and students who will work in the textile and fashion industries and aim to address environmental issues in the sector.

BMBF

The “**Partnerships for sustainable solutions with Sub-Saharan Africa**” take a similarly practice-oriented approach, with eight projects dedicated to climate and environment topics. Higher education institutions, businesses and non-university research institutions are working together on research topics and transferring these into practice. They are also focusing on how to integrate these topics into postgraduate teaching and training methods.

BMZ

The “DKTI Brazilian-German Technology Partnership” project run by the German Federal Ministry of Economic Cooperation and Development (BMZ) is running the programme “**German-Brazilian Partnerships in Sustainable Development – NoPa 2.0**” which promotes partnerships in the energy sector, focusing on green hydrogen, power-to-X, direct electrification and energy storage. In addition to funding Brazilian-German teaching and research partnerships and promoting expertise in international partnerships, NoPa 2.0 is supporting the expansion of an international network.

BMZ

Making connections between higher education and the industry is the focus of the “**University-Business-Partnerships between Higher Education Institutions and Business Partners in Germany and in Africa**” programme. Through projects such as ► *Sustainable Urban Development through Logistics Education in Rwanda*, higher education institutions and businesses collaborate directly on aligning study programmes linked to climate and environment with the demands of the labour market. Through this, they are forging stronger links between education and practice, and boosting graduate employability. At the same time, they are forming a reservoir of skilled professionals and facilitating the transfer of innovative research findings into professional practice.

RESULTS AND IMPACTS 2020/2021



18% of DAAD alumni and alumnae said they were working in a field linked to climate or the environment three years after they had received funding.



Of these, **67%** reported producing academic publications, with an average of **five publications** per person.

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EXAMPLES FROM PRACTICE – NETWORKING

In order to improve the quality of strategic networking, the DAAD employs several programmes to establish centres that facilitate and strengthen interdisciplinary partnerships on specific topics between higher education institutions and non-university partner institutions. It is also expanding an umbrella network between the individual centres through measures such as joint lecture series and exchanges between researchers.

AA

As one of the “**Global Centres for Climate and Environment**”, the ► *Transnational Centre for Just Transitions in Energy, Climate & Sustainability (TRAJECTS)* is building capacities in teaching and research in this area. A key area of activity for the centre is funding practice-related research stays and work placements with the goal of orienting research as closely as possible around needs and policy, and to bring about real changes. The network includes institutions from civil society, academia, business and administrative bodies, which can offer research stays and/or work placements. The project has deliberately chosen to offer research stays not only to academics, but also to members of partners in practice.

AA

BMZ

Promoting professional development and networking between so called Germany alumni and stakeholders in academia, politics, society, culture and business forms the goal of the “**Alumni programme for the German Higher Education Institutions**” (funded by AA and BMZ) and the programme “**SDG Alumni Projects for Germany Alumni from developing and emerging countries**” (funded by BMZ). The SDG Alumni Projects allow academics, researchers and managerial staff from the Global South who have studied or conducted research in Germany to take part in a combination of selected training programmes, trade fairs and conferences. These include events related to climate and environment, such as water, wastewater, waste, renewable energy, food security and biodiversity.

BMZ

The “**Excellence Centres for Exchange and Development – exceed**” programme funds projects which consolidate activities of German higher education institutions and their partners in the field of climate and the environment, and to make these more widely visible. For example, in addition to funding research, the ► *SDG-nexus Network* aims to bring climate-related topics and research findings to the attention of public institutions and policymakers by integrating non-university stakeholders directly in the project structure.

Other programmes whose work includes establishing centres related to climate issues include the “**Centres of African Excellence**”, “**Centres of Excellence in Research and Teaching**”, and the “**SDG Graduate Schools**”.

RESULTS AND IMPACTS 2020/2021



106 climate-related events took place as part of funding activities.



22 alumni activities took place.

CLIMATE AND ENVIRONMENT-SPECIFIC DAAD FUNDING PROGRAMMES (AS OF 2022)

Funded by	Programme	Programme start	Partner countries / region	Further information
AA	Global Centres for Climate and Environment as well as Health and Pandemic Preparedness	2021	Colombia, Ivory Coast, India, Israel, Jordan, Kenya, Palestinian territories, South Africa, Thailand	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/globale-zentren/
	Climate Research Alumni and Postdocs in Africa (climapAfrica)	2019*	Africa	https://www.daad.de/en/the-daad/what-we-do/sustainable-development/funding-programmes/climapafrica/
	ERA Fellowships - Green Hydrogen	2022	EU member states, Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Israel, Kosovo, Moldova, Montenegro, Morocco, North Macedonia, Norway, Serbia, Switzerland, Tunisia, Turkey, UK, Ukraine	https://www.daad.de/en/study-and-research-in-germany/scholarships/green-hydrogen/
BMBF	Make Our Planet Great Again – German Research Initiative (MOGPA-GRI)	2018*	worldwide	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/mopga-gri/
	Sustainable Water Management (NaWaM)	2012	Brazil, Indonesia, Iran, Jordan, Kazakhstan, Mongolia, Namibia, Vietnam	https://www.fona.de/en/measures/international-cooperation/scholarship-programme-sustainable-water-management.php
	Science Partnerships for the Adaptation to Complex Earth System Processes in the Region of Southern Africa II (SPACES II) – Capacity Building/ Development (CaBuDe)	2018	Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Zambia	https://www.fona.de/medien/pdf/SPACES_II_BRO_DEU_2022.pdf
BMZ	German-Brazilian Partnerships in Sustainable Development – NoPa 2.0	2022	Brazil	https://www.daad.de/de/infos-services-fuer-hochschulen/weiterfuehrende-infos-zu-daad-foerderprogrammen/nopa-20/

* (expired 2022)

OTHER DAAD FUNDING PROGRAMMES THROUGH WHICH INDIVIDUAL PROJECTS RELATED TO CLIMATE AND ENVIRONMENT RECEIVED FUNDING (AS OF 2022)

Funded by	Programme	Programme start	Project example(s)	Partner countries / region	Further information
AA	Kazakh-German University (DKU)	2021	Integrated Water Resource Management Strategic Management of renewable Energy and Energy Efficiency	Kazakhstan	https://dku.kz/en/
	Centres of Excellence in Research and Teaching	2009	Energy and environmental technology Cooperation Center of Excellence in Marine Sciences (CEMarin)	Chile, Colombia, Thailand, (Russia)	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/exzellenzzentren/
	Centres of African Excellence	2013	Ghanaian-German Centre for Development Studies (GGCDS)	Ghana	https://www.digiface.org/
			Promoting Academic Capacities for Sustainable Agricultural Resources Use in West Africa (Pro-RUWA)	Benin, Burkina Faso, Niger	
			West African German Centre for Sustainable Rural Transformation (WAC-SRT)	Ghana, Niger	
AA BMZ	Alumni programme for the German Higher Education Institutions	1999 (BMZ), 2006 (AA), since 2009 in a joint programme call		Worldwide	https://www.daad.de/en/alumni/funding-programmes-for-alumni/alumni-programme-for-the-german-higher-education-institutions/
	A New Passage to India	2009	Indo-German Centre for Sustainability (IGCS)	India	https://www.igcs-chennai.org/
BMBF	Partnerships for sustainable solutions with Sub-Saharan Africa	2016	Sustainable solutions to develop local protein-rich crops from subsistence plants into high-tech products (SusTec)	Namibia	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/partnerships-with-sub-saharan-africa/
	Transnational Education (TNE) – Courses offered by German higher education institutions abroad	2019	Integrated Water Resources Management with focus on Latin America and the Caribbean	Costa Rica	https://www.tt.th-koeln.de/blog/news/new-master-program-coming-up-iwrm-lac/

OTHER DAAD FUNDING PROGRAMMES THROUGH WHICH INDIVIDUAL PROJECTS RELATED TO CLIMATE AND ENVIRONMENT RECEIVED FUNDING (AS OF 2022)

Funded by	Programme	Programme start	Project example(s)	Partner countries / region	Further information
BMZ	Excellence Centres for Exchange and Development – exceed	2009	Center for Natural Resources and Development (CNRD)	Brazil, Colombia, Ethiopia, Ghana, India, Mexico, Mozambique, Pakistan, Peru, South Africa, Tanzania, Vietnam	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/exceed/
			International Network on Sustainable Water Management in Developing Countries (SWINDON)	Argentina, Brazil, Burkina Faso, China, Egypt, Ethiopia, Indonesia, Jordan, Kenya, Malawi, Mexico, Thailand, Togo, Turkey, Vietnam	
			SDG-nexus Network	Colombia, Ecuador, Kyrgyzstan, Tajikistan, Uzbekistan	
	Subject-related Higher Education institution partnerships	1997	Curriculum development for climate-resilient urban renewal	Cuba	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/subject-related-partnerships-with-institutions-of-higher-education-developing-countries/
	SDG Alumni Projects for Germany alumni from developing and emerging countries	2006	International circular economy week	Germany	https://www.daad.de/en/alumni/funding-programmes-for-alumni/sdg-alumni-projects/
	SDG Graduate Schools	2016	German-Ethiopian SDG Graduate School: Climate Change Effects on Food Security (CLIFOOD)	Ethiopia	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/sdg/
			RoHan Catalysis – SDG Graduate School	Vietnam	
University-Business-Partnerships between higher education institutions and business partners in Germany and in developing countries	2012	Sustainable Urban Development through Logistics Education in Rwanda	Rwanda	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/university-business-partnerships/	
SDG Partnerships	2022	Promoting Himalayan Development by Strengthening Teaching and Research on Sustainable Development Goals (ForHimSDG)	Nepal, Thailand	https://www.daad.de/en/information-services-for-higher-education-institutions/further-information-on-daad-programmes/sdg-partnerschaften/	
EU	Erasmus+ Cooperation Partnerships in Higher Education	2021	Challenge4Impact: Developing Partnerships for International Virtual Student Business Challenges in Sustainable Entrepreneurship	Netherlands, Sweden	https://eu.daad.de/eudownloadcenter/download/1011/
			Greening Games – Building Higher Education Resources for Sustainable Video Game Production, Design and Critical game studies	Czech Republic, Finland, Netherlands	
	Erasmus+ Strategic Partnerships for Higher Education	2014	Towards a European Landscape economy for a Sustainable urban development	Belgium, Italy, Netherlands, Poland, Turkey	
			Locally organized transition of urban sustainable spaces	France, Italy, Latvia, Czech Republic	
School Garden goes Europe	Austria, Hungary	https://eu.daad.de/eudownloadcenter/download/808/			
Sustainable Fashion Curriculum at Textile Universities in Europe – Development, Implementation and Evaluation of a Teaching Module for Educators	Bulgaria, Romania				

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