Handout on Results-Oriented Monitoring

The Programme for Bilateral SDG Graduate Schools is subject to results-oriented monitoring in coordination with the donor, the German Federal Ministry for Economic Cooperation and Development (BMZ). This is based on the results framework of the programme as well as on indicators which make the individual elements of the results framework systematically observable. The results framework and indicators, together with the corresponding requirements made of the higher education institutions participating in the project, are presented and explained in this handout.

1. Results Framework

1.1. Function and Origination of the Results Framework

A results framework represents a central reference document for the results-oriented planning of development cooperation projects and programmes and forms the basis for monitoring and evaluating these programmes, in this case the programme for establishing bilateral SDG graduate schools. It fulfils various functions:

- The results framework describes which direct and indirect impacts the programme is intended to unfold. It hence serves to **illustrate the funding logic** of the programme and clarify the causal relationships between the contributions made by the various project stakeholders, the project activities, and short-term results as well as the intended medium and long-term impacts of the programme.

- Indicators serve to visualise changes in the anticipated results. The results framework enables the **funded projects' contribution** towards these observed changes to be made plausible and accessible to examination.

- Furthermore, the results framework serves as the basis for formulating concrete target results for each individual project. The results framework is hence the fundamental tool which enables the higher education institutions and the DAAD to jointly assess the respective **status of project progress and goal achievement** and develop the programme further in open dialogue within the scope of a results-oriented programme management.

- It simultaneously serves the purpose of **demonstrating accountability** towards the donor. The programme goals agreed between the German Federal Ministry for Economic Cooperation and Development (BMZ) and the DAAD are set out in the results framework. Indicators enable the degree of target achievement to be observed and reviewed.

- In addition, the results framework is to serve as a basis for enabling **institutional learning** both in the DAAD as well as in the higher education institutions participating in the project. Since the higher education institutions report on their projects throughout the results framework, this makes it easier to identify "good practices" and "lessons learned" and pass them on as inspirational pointers.

To fulfil these functions, the goals of a programme must be clearly defined. These goals are presented at the outcome level in a results framework. In addition, it must be determined how the goals are to be achieved. This happens through the causal relationships presented in the results framework. The Development Assistance Committee of the OECD (OECD-DAC) provides a definition of the term "results chain":

> "The causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives – beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts, and feedback."
>
> *(OECD-DAC, Glossary of Key Terms in Evaluation and Results Based Management, 2009)*

A results framework hence maps the hypotheses and possibilities for change which form the basis of a programme's funding logic. The various levels of the results framework represent the starting point for developing indicators which are used to verify whether the changes intended by the programme have been achieved. The results framework of the programme for establishing bilateral SDG graduate schools is presented on page 5. It was developed by the DAAD together with representatives from higher education institutions implementing funding projects within the programme and is coordinated and agreed with the donor.

1.2. Key Terms and Definitions

The results framework of the programme is based on the **definitions of the German Federal Ministry for Economic Cooperation and Development (BMZ)** for inputs/activities, outputs, outcomes, and impacts[1]. These are:

> **Inputs/activities:** financial, personnel, and material resources deployed for a development measure or actions or activities required to achieve specific outputs.

In the results framework of the programme for establishing bilateral SDG graduate schools inputs are provided by the DAAD as well as by the higher education institutions and other partners. Activities are actions undertaken by the project-implementing higher education institutions and their partners that are required for achieving the outputs (e.g. conducting events).

> **Output:** generated technical capacities, personal competence, or knowledge transfer resulting from the use of resources and conducting activities.

For example, an output can be that the partner higher education institutions' teaching staff have the requisite specialist and didactic qualifications.

[1] BMZ Section 212, Attachment to Handout and Commented Structure for Programme Proposals (PP) and Reporting for Joint Development Cooperation Programmes (PP), standards for goals, indicators, results logic, and results matrix, 2013.

Outcome: direct (short and medium-term) positive and negative, intended and unintended impacts resulting from the use of the outputs for the target group and/or for public goods. The outcome level hence maps the key results directly attributable to the programme and/or the project. Since goals are to be understood as intended results, the key programme goals are formulated at this level.

For example, an outcome can be that the partner higher education institutions offer study courses deploying ICT-based methods in keeping with the local context and cutting-edge scientific knowledge.

Impact: (longer-term) development impacts, including positive and negative, primary and secondary long-term effects that are directly or indirectly, intentionally or unintentionally caused by a development measure.

For example, an impact can be the improvement in quality and relevance of teaching and research at the partner higher education institutions.

1.3. Results Framework of the Programme for Bilateral SDG Graduate Schools

In the following reference is made to the individual levels of the diagram depicting the programme's results framework on page 5. For the sake of completeness, all levels are taken into account. As regards the monitoring of the programme, however, only the activities, output, and outcome levels are relevant since longer-term impacts lie outside the direct area of influence of the programme and its funding projects. Contributions at the impact level usually only occur with a time lag (possibly only after the end of the programme) and have little relevance to direct programme management. They are therefore not reviewed within the scope of monitoring but by way of evaluations. Changes at the outcome level are possibly also only observable towards the end of the project period.

At the **impact level** the programme is intended to contribute towards sustainable development within the meaning of the SDG and help establish high-quality and outward-looking higher education institutions in Germany and the partner countries. To achieve this, the quality and relevance of teaching and research at the partner higher education institutions is to be improved This also benefits specialists whose thus acquired expertise is to be deployed in solving development-relevant issues. The long-term goal is to ensure that the SDG graduate schools are competitive and sustainable.

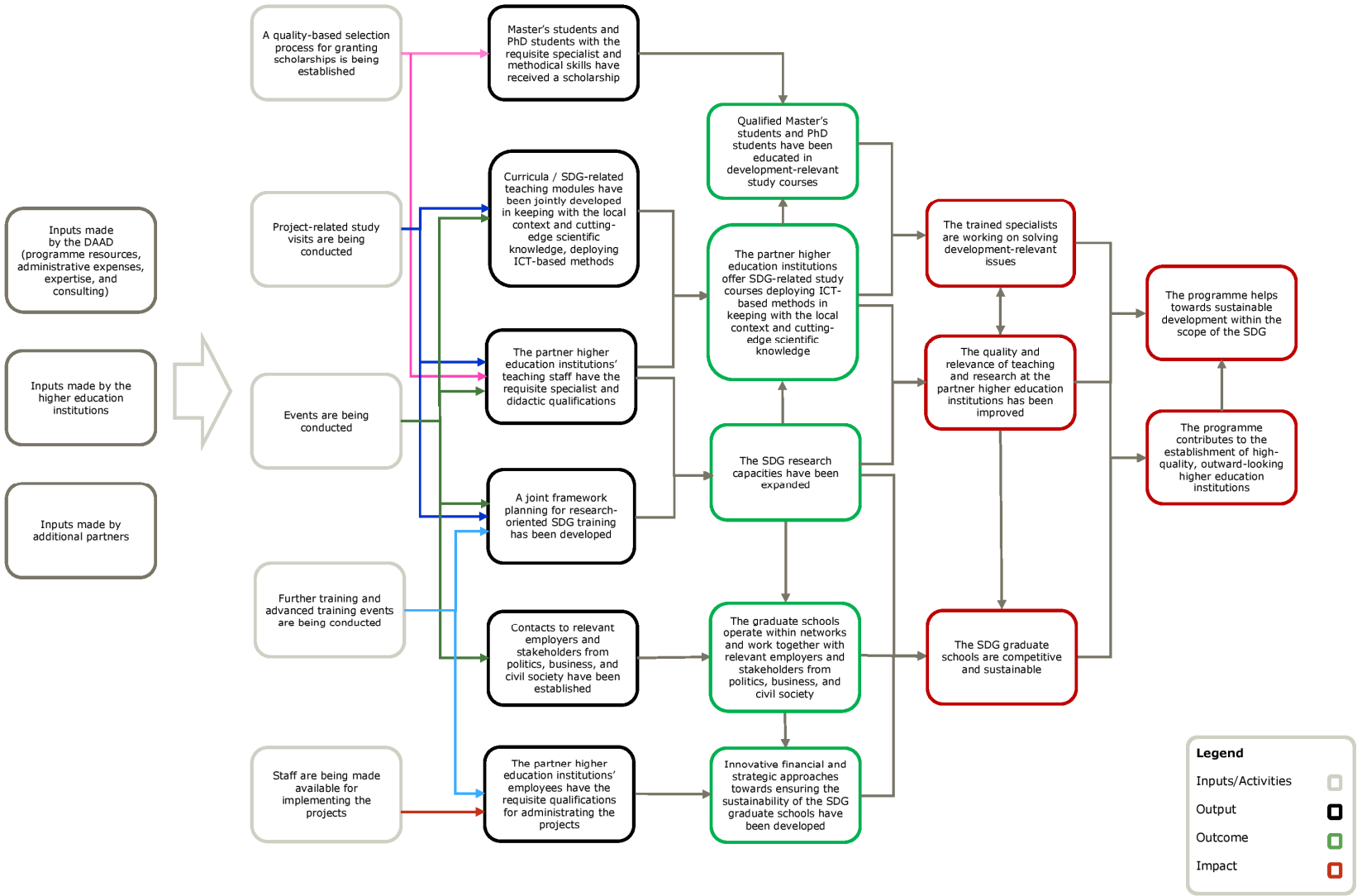
To contribute towards these long-term impacts, the programme for establishing bilateral SDG graduate schools focuses on four core objectives at the **outcome level**:

- Qualified Master's students and PhD students have been educated in development-relevant study courses.
- The partner higher education institutions offer study courses deploying ICT-based methods in keeping with the local context and cutting-edge scientific knowledge.
- The SDG research capacities have been expanded.
- Innovative financial and strategic approaches towards ensuring the sustainability of the SDG graduate schools have been developed.

The prerequisites for achieving the core objectives are created at the **output level**: A transparent and quality-based selection process ensures that Master's students and PhD students with the requisite specialist and methodical skills are granted a scholarship. The range of study courses is to be improved and expanded as required by jointly developing new curricula and teaching modules in keeping with the latest scientific developments. A key success factor in expanding research capacities is the development of a joint research agenda in keeping with the topics of the 2030 Agenda. Last but not least, the partner higher education institutions must be well-equipped in terms of personnel to be able to meet all challenges on the way to achieving the goals. This requires teaching staff with both the requisite specialist and didactic qualifications and administrative staff with sufficient administrative competences.

Based on the inputs provided by the DAAD, higher education institutions, and possibly additional partners, activities such as events, project-related stays, further education and advanced training courses can be conducted so as to achieve the outputs at the **activities level** within the projects. In addition, the partner higher education institutions are expected to establish a quality-based selection process for granting scholarships. Resources for deploying project staff are available within reasonable bounds.

Bilateral SDG Graduate Schools



2. Indicators

To be able to measure the results achieved within the scope of the programme for establishing SDG graduate schools, the DAAD has formulated programme indicators for the various levels of the results framework, e.g.:

- number of PhD students, scientists and academics, teachers, and professors who qualified in specialist and cross-discipline subjects and methods and/or didactics in the reporting year and have achieved such qualifications since the beginning of funding in 2016.

In addition, the status report must provide information on quality-based indicators, e.g.:

- quantitative description of the use of ICT-based methods in curricula, teaching modules, or teaching events that have been developed or revised with the support of the programme.

The programme indicators are formulated in general terms. To additionally enable a project-specific target/actual comparison, applicants are obliged to take up the activities, outputs, outcomes, and assigned programme indicators presented in the results framework and adapt these to their specific project, making them measurable.

This handout provides a definition of, and quality criteria for, indicators and demonstrates the approach to developing project-specific indicators by providing examples.

2.1 Definition of an Indicator:

For the purpose of this application, an indicator is defined according to OECD/DAC:

> Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.
>
> *Source: OECD-DAC, (2009), Glossary of Key Terms in Evaluation and Results Based Management*

2.2 Quality Criteria for Indicators:

Indicators formulated for this application should meet the SMART criteria:

Specific	precise and clear in terms of quality / quantity *(who? what? how?)*
Measurable	measurable with reasonable effort and cost
Attainable	realistically achievable
Relevant	expressive of the intended changes (*does the indicator actually show changes at the activities level or output level?)*
Time-Bound	the time frame is fixed

2.3 Procedure for Adapting the Programme Indicators to a Specific Project

The following examples demonstrate the procedure for adapting the programme indicators to a specific project. **The basis for this are not only the programme indicators presented here as examples, but the complete list of indicators developed for the programme (cf. section 2.5). This list also serves as the reference framework for the annual reporting of the higher education institutions to the DAAD (status report).** Applicants should therefore select indicators relevant to their partnership from the complete list of programme indicators and should allocate project-specific target values to them (benchmarking). This means the programme indicators are supplemented in such a way that the degree of target achievement is measurable at the level of the individual projects. Observance of the prescribed programme indicators does not rule out that additional indicators may also be defined to map a specific project workflow to enable additional statements to be made about project progress and the degree of target achievement.

Example of formulating a project indicator at **outcome level**:

Outcome: The SDG research capacities have been expanded.

Programme indicator:

Number of research and consultancy products of the participant higher education institutions developed with the support of the programme in the reporting year and since the start of funding (for differentiation, see list of indicators).

Project indicator:

At least 4 project or research applications have been submitted with the participation of at least two higher education institution partners, forming a project-related research cluster lasting till December 2017.

Specific?	✓	Who: at least two higher education institution partners What: at least two applications are required to form a project - related research cluster
Measurable?	✓	Number of applications submitted
Attainable?	✓	The indicator is realistically achievable using the available programme funds and within the stated time horizon.
Relevant?	✓	The indicator is expressive with regard to the output "The SDG research capacities have been expanded".
Time-Bound?	✓	The time frame for achieving the indicator is set as December 2017.

In this regard the reporting is not entirely based on quantitative indicators but also allows the qualitative description of project progress. Correspondingly the status report will provide a qualitative description of the research applications.

Example of formulating a project indicator at **output level**:

Output: The partner higher education institutions' teaching staff have the requisite specialist and didactic qualifications.

Programme indicator:

Number of participants in the further education and advanced training events conducted in the reporting year (for differentiation, see list of indicators).

Project indicator:

At least 15 young scientists and academics and professors from Mozambique are to receive further training in blended learning didactics via a three-day course by February 2017.

Specific?	✓	Who: at least 20 young scientists and academics and professors What: three-day training course in blended learning didactics
Measurable?	✓	This can be documented using the course attendance lists.
Attainable?	✓	The indicator is realistically achievable using the available programme funds and within the stated time horizon.
Relevant?	✓	The indicator is expressive with regard to the output "The partner higher education institutions' teaching staff have the requisite specialist and didactic qualifications". This only relates to the methodological further training, an additional indicator can possibly be created for the specialist further training.
Time-Bound?	✓	The time frame for achieving the indicator is set as February 2017.

Example of formulating a project indicator at **activities level**:

Activity: project-related study visits are being conducted.

Programme indicator:

Number of scholarships conducted in the reporting year (for differentiation, see list of indicators).

Project indicator:

By December 2018, at least five PhD students are to complete a research visit at the German partner higher education institution within the scope of writing their dissertation and create a poster.

Specific?	✓	Who: 5 PhD students What: research visit to the German partner higher education institution
Measurable?	✓	5 posters on the respective research topics
Attainable?	✓	The indicator is realistically achievable using the available programme funds and within the stated time horizon.
Relevant?	✓	The indicator is expressive with regard to the activity “Project-related study visits are being conducted”.
Time-Bound?	✓	The time frame for achieving the indicator is set as December 2018.

2.4 List of indicators for the Programme Bilateral SDG Graduate Schools – Activities

Activity	Indicator
A quality-based selection process for granting scholarships is being established	**Number of graduate schools that have jointly elaborated and bindingly established a criteria catalogue for granting scholarships.**
	# Type (criteria catalogue for granting scholarships)
	# Status (prepared, launched, completed, other)
Events are being conducted	**Number of events conducted in the reporting year, differentiated according to**
	# Type (workshop/seminar, symposium/conference, summer school, other)
	# Characteristic (further education and advanced training; planning and steering; other)
	# Implementing organisation (higher education institution; DAAD; third parties; other)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)
	# Country
	Number of participants in the events conducted in the reporting year
Project-related study visits are being conducted	**Number of scholarships conducted in the reporting year, differentiated according to**
	# Surname, first name of the scholarship holder
	# New scholarship in the reporting year (yes; no)
	# Sending country (DAAD key)
	# Country of citizenship (DAAD key)
	# Destination country (DAAD key)
	# Status (Bachelor's student; Master's student; PhD student; academic / higher education institution teacher (excluding professors); professors; other scholarship holders)
	# Subject group (DAAD key)
	# Study area (DAAD key)
	# Gender (female; male; not specified)
	# Type of funding (travel expenses and/or subsistence allowance; scholarship including extra expenses; remuneration (e.g. for visiting lecturers))
	# Type of project (studies; research; language course; specialist course/workshop; internship; study visit; teaching post)
	# Funding duration in days
Further training and advanced training events are being conducted	**Number of further training and advanced training events conducted in the reporting year, differentiated according to**
	# Type (workshop/seminar, symposium/convention/conference, summer school, other)

	# Characteristic (further education and advanced training; planning and steering; other)
	# Implementing organisation (higher education institution; DAAD; third parties; other)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)
	# Town or city (country)
	Number of participants in the further education and advanced training events conducted in the reporting year, differentiated according to
	# Gender (female; male; not specified)
	# Country of origin (DAAD key)
	# Status (Bachelor's student; Master's student; PhD student; academic / higher education institution teacher (excluding professors); professors; other scholarship holders (e.g. administrative staff))
	# Type of participants (internal (belonging to the project); external (not belonging to the project); other)
Staff are being made available for implementing the projects	**Number of full-time equivalents funded via DAAD programme resources available to each participant higher education institution in the reporting year, differentiated according to**
	# Area to which the employee is formally allocated (scientific area, administrative area, other)

2.5. List of indicators for the Programme Bilateral SDG Graduate Schools – Output

Output	Indicator
Master's students and PhD students with the requisite specialist and methodical skills have received a scholarship	**Number of scholarships conducted in the reporting year, differentiated according to**
	# Type of project (studies; research; language course; specialist course/workshop; internship; study visit; teaching post)
	Number of scholarship holders in the reporting year, differentiated according to
	# Surname, first name of the scholarship holder
	# New scholarship in the reporting year (yes; no)
	# Sending country (DAAD key)
	# Country of citizenship (DAAD key)
	# Destination country (DAAD key)
	# Status (Bachelor's student; Master's student; PhD student; academic / higher education institution teacher (excluding professors); professors; other scholarship holders)
	# Subject group (DAAD key)
	# Study area (DAAD key)
	# Gender (female; male; not specified)
	# Type of funding (travel expenses and/or subsistence allowance; scholarship including extra expenses; remuneration (e.g. for visiting lecturers))
	# Type of project (studies; research; language course; specialist course/workshop; internship; study visit; teaching post)
	# Funding duration in days
Curricula / SDG-related teaching modules have been jointly developed in keeping with the local context and cutting-edge scientific knowledge, deploying ICT-based methods	**Number of newly developed, revised, or reintroduced curricula, teaching modules and / or teaching events made possible through the support of the programme, differentiated according to**
	# Type (curriculum, teaching module, teaching event, other)
	# Title / topic
	# Newly developed or revised (newly developed; revised)
	# Level (BA; MA; PhD; other)
	# Status (conception phase started; available as a draft; coordinated and agreed within the higher education institution; trial; offered; accredited; other)
	# Definition of learning outcomes (yes; no – if yes, enclose as an attachment to the status report)
	# Inclusion of actors from outside the higher education sector in the development (yes; no)
	# Use of ICT-based methods in the development (yes; no)
	# Use of ICT-based teaching methods planned (yes; no)

	Qualitative description of the development policy relevance of curricula, teaching modules and/or teaching events newly developed or revised with the support of the programme and their value added for the partner higher education institution.
	Qualitative description of the inclusion of external actors.
A joint framework planning for research-oriented SDG training has been developed	**Number of developed framework plans for a research-oriented training course in the reporting year and since the start of funding, differentiated according to**
	# Status (submitted, undergoing revision, accepted, other)
	# Number of involved people (PhD students, academics / higher education institution teachers, professors, other)
	# Specialist field (DAAD key)
	# Qualitative description
The partner higher education institutions' teaching staff have the requisite specialist and didactic qualifications	**Number of further training and advanced training events conducted in the reporting year, differentiated according to**
	# Type (workshop/seminar, symposium/conference, summer school, other)
	# Characteristic (further education and advanced training; planning and steering; other)
	# Implementing organisation (higher education institution; DAAD; third parties; other)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)
	# Town or city (country)
	Number of participants in the further education and advanced training events conducted in the reporting year, differentiated according to
	# Gender (female; male; not specified)
	# Country of origin (DAAD key)
	# Status (PhD student; academic / higher education institution teacher (excluding professors); professors; other)
	# Type of participants (internal (belonging to the project); external (not belonging to the project); other)
	# Type of qualification (scientific subjects / methods; cross-discipline subjects / methods; didactics; transfer of practical experience; other)
The partner higher education institutions' employees	**Number of further training and advanced training events conducted in the reporting year, differentiated according to**

have the requisite qualifications for administrating the projects	# Type (workshop/seminar, symposium/convention/conference, summer school, other)
	# Characteristic (further education and advanced training; planning and steering; other)
	# Implementing organisation (higher education institution; DAAD; third parties; other)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)
	# Town or city (country)
	Number of participants in the further education and advanced training events conducted in the reporting year, differentiated according to
	# Gender (female; male; not specified)
	# Country of origin (DAAD key)
	# Status (personal)
	# Type of qualification (cross-discipline subjects; other)
Contacts to relevant employers and stakeholders from politics, business, and civil society have been established	**Number of contacts to external actors newly established within the scope of the SDG graduate schools, differentiated according to**
	# Contact person (representatives from politics, business, civil society, other)
	# Qualitative description of the contact / contact person (organisation, status/function within the organisation, value added for the project)
	Number of events conducted in the reporting year, differentiated according to
	# Type (workshop/seminar, symposium/convention/conference, summer school, other)
	# Characteristic (further education and advanced training; planning and steering; other)
	# Implementing organisation (higher education institution; DAAD; third parties; other)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)
	# Town or city (country)
	# Participation of external actors from politics, business, civil society (yes/no)

2.6 List of indicators for the Programme Bilateral SDG Graduate Schools – Outcome

Outcome	Indicator
Qualified Master's students and PhD students have been educated in development-relevant study courses	**Number of graduates who have received a scholarship (PhD or Master's scholarship)**
	# Gender (female; male; not specified)
	# Country of origin (DAAD key)
	# Status (PhD students, Master's students)
	# Study progress (started, thesis submitted, degree received)
	# Scholarship group / scholarship start (Year / Month)
	Qualitative explanation of the reasons for discontinuations in the reporting year and since the start of funding
The partner higher education institutions offer SDG-related study courses deploying ICT-based methods in keeping with the local context and cutting-edge scientific knowledge	**Number of planned students for a study course where the curriculum, teaching modules, or teaching events were revised or newly developed with the support of the programme for establishing bilateral SDG graduate schools**
	# Type (curriculum, teaching modules or teaching events, other)
	Number of applicants for a study course where the curriculum, teaching modules, or teaching events were revised or newly developed with the support of the programme for establishing bilateral SDG graduate schools, in the reporting year
	# Type (curriculum, teaching modules or teaching events, other)
	Number of students in a study course where the curriculum, teaching modules, or teaching events were revised or newly developed with the support of the programme for establishing bilateral SDG graduate schools, in the reporting year and since the start of funding
	# Type (curriculum, teaching modules or teaching events, other)
	Number of teachers in a study course where the curriculum, teaching modules, or teaching events were revised or newly developed with the support of the programme for establishing bilateral SDG graduate schools, in the reporting year
	# Type (curriculum, teaching modules or teaching events, other)
	Quantitative description of the type of deployment of ICT-based methods in curricula, teaching modules and/or teaching events developed or revised with the support of the programme

	Value added of the deployment of ICT-based methods for the learning success of the students (assessment on a scale)
The SDG research capacities have been expanded	**Number of research and consultancy products of the participant higher education institutions developed with the support of the programme in the reporting year and since the start of funding, differentiated according to**
	# Title
	# Type (project and research applications; other)
	# Status (submitted, undergoing revision, accepted, rejected, other)
	# Participating partners
	Qualitative description of the research applications
	Number of publications generated with the support of the programme in the reporting year and since the start of funding, differentiated according to
	# Author
	# Title
	# Type of publication (article in scientific magazines; conference article; book chapter (contribution in edited volume); book (edited volume or monograph); working paper/technical report; other)
	# Date of publication
	# Generated within the scope of a PhD degree funded by the programme? (yes; no)
Innovative financial and strategic approaches towards ensuring the sustainability of the SDG graduate schools have been developed	**Number of graduate schools that have jointly elaborated and bindingly established a strategy to ensure sustainability.**
	# Type (teaching; research; higher education institution management; network; other)
	# Status (prepared; launched; completed; other)
The graduate schools operate within networks and work together with relevant employers and stakeholders from politics, business, and civil society	**Number of networks, differentiated according to**
	# Status (existing or newly established)
	# Partner structure (North-South, South-South, North-South-South)
	# Key specialist subject
	# Key regional focus
	# Participation of external actors from politics, business, civil society (yes/no)
	# Contribution to prioritised SDG (drop-down targets 1 - 16)

Impact indicators can be provided by the DAAD on request. These are gathered by the DAAD within the scope of periodical evaluations.