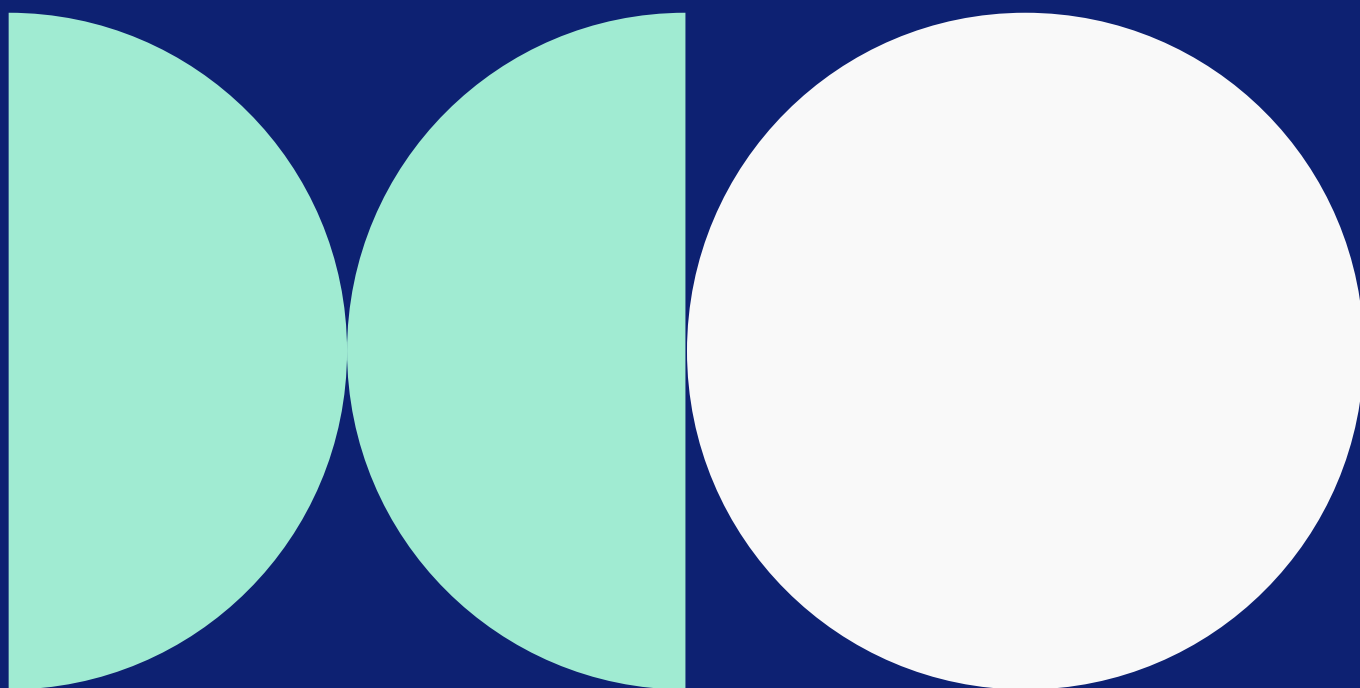


Research review 2023

Development research



Research review 2023 - development research

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1 Foreword

This report contains recommendations for initiatives to promote development research in Sweden, based on analyses of the current situation and trends for research in the area. Together with reviews of other scientific fields, this report will form the foundation for the Swedish Research Council's strategic work. They also form central background material for the Swedish Research Council in its work to produce documentation for the Government's upcoming research policy bill. The research review has been produced by the Committee for Development Research at the Swedish Research Council.

Development research at the Swedish Research Council covers support for research of particular relevance to the fight against poverty and for sustainable development in the least developed countries, and support for collaboration and knowledge exchange between researchers in Sweden and researchers in the least developed countries and lower middle income countries. Development research includes both research in development and research for development, spans a large disciplinary range and covers both basic and more applied research.

The research support for development research is funded via Sweden's international development aid, where the goal is to create preconditions for better living conditions for people living in poverty and repression. The funds shall be used in accordance with the OECD's definition of development aid. Since 2013, the Swedish Research Council and its Committee for Development Research have been responsible for support to development research.

This research review presents the preconditions, challenges and development opportunities for development research. The review concludes with six recommendations for how the development research support can be strengthened to not just contribute to research of the highest quality, but also to an even greater extent generate knowledge that creates opportunities for better living conditions for people who live in poverty and under oppression, and for sustainable development.

The research review is based on contemporary environment monitoring nationally and internationally, a review of grant applications approved, and a survey aimed at researchers in the scientific field. A session was also arranged during the development research conference DevRes, in August 2022, to discuss the review and gather viewpoints, and the research community also had the opportunity to comment on a preliminary version of the review via an internet consultation.

We would like to thank all who have contributed to the research review.

Ingrid Öborn (Chair)
Committee for Development Research

Erik Ahlgren
Assistant Secretary General

2 Summary

Development research covers research of particular relevance to the fight against poverty and for sustainable development in least developed countries. It includes both research in development and research for development, and spans a large disciplinary range that covers both basic and more applied research. The Swedish Research Council supports development research of the highest scientific quality.

Development research is central in a globalised world, not least for questions and challenges linked to the UN's sustainable development goals. Development in fast-growing, least developed countries and lower middle income countries is entirely crucial for how the sustainable development goals can be fulfilled, and for issues relating to migration, antibiotic resistance, pandemics, unequal health, and threatened biodiversity.

Development research generates research results of great relevance to the fight against poverty and for sustainable development. It is therefore important that the results are put to use, and have impact. The Committee therefore emphasises the need for methods and tools to promote the impact of the research.

The freedom and independence of research is threatened or severely limited in many countries. For many researchers and collaboration partners in development research, this is a highly topical reality. The independence and freedom of research must be safeguarded. International collaboration contributes to building up academic freedom and creating universities and other education institutions that are less subject to political direction.

Collaboration with researchers in the least developed countries and lower middle income countries is central in development research, in order to understand different contexts, to enable relevant questions to be formulated, and to implement research that may contribute to sustainable development. The Committee for Development Research strives to ensure collaboration between researchers is conducted on equal terms. Mutual learning is also central. Development research can contribute to capacity development through collaboration. In this context, publication with open access is of the greatest importance, as is safeguarding openly accessible data.

Collaboration on equal terms requires financial resources, but also time. For development research, which is often based on field work and interaction between many actors, the option of longer project periods and long-term planning is of the greatest importance. Long-term funding can also contribute to promoting more active work with the impact of the research.

The Committee for Development Research sees a need to safeguard the provision of new generations of researchers within the scientific field. It is therefore very important that there is budgetary room to offer specific support to

researchers in the early stages of their careers, through specific grant forms and targeted calls. Development research has much to gain from different actors and funding bodies collaborating and uniting their strengths to reinforce and development the research field.

3 The preconditions for development research

3.1 Introduction

This research review has been produced by the Committee for Development Research at the Swedish Research Council. It presents the background to development research, challenges and recommendations for the continued development of the field. Development research at the Swedish Research Council covers both research into development and research for development, and therefore spans a large disciplinary range. It covers both basic and more applied research, as long as the research is particularly relevant to the fight against poverty and for sustainable development in least developed countries.

There are many reasons why comprehensive and strong development research is needed. All around the world, we are today seeing increased polarisation and authoritarian forms of government, raised military conflict levels and threats against economic systems and human health. We are seeing large-scale migration, long-term societal effects of the COVID-19 pandemic, and the spread of antimicrobial resistance. We are also seeing failings in gender equality, inequality and reduced academic freedom, ever clearer effects of climate change, and ever more critical threats against biodiversity. Many of these developments are related to each other, and are global phenomena with global consequences.

At the same time as knowledge development has enabled great advances within areas such as global health, education, social planning, working life, automation of industrial activities, climate, energy, agriculture and in the environmental area, the needs – but also the opportunities – to develop global research that contributes to knowledge in these areas are perhaps greater than ever before.

Research is needed to contribute knowledge to Agenda 2030, and to achieve the global sustainability goals in a world that is rapidly changing. Research contributes to understanding how changes in the world around us affect the chances of achieving the goals. Research is required to identify, understand and manage synergies and goal conflicts between the different sustainability goals. Research is also needed to create and clarify solutions, and to understand the consequences of different actions. This means that the research questions are often complex, and interdisciplinary research is therefore central in development research.

Solutions and methods also need to be adapted according to regional and local conditions, as made clear not least by the COVID-19 pandemic. Research collaboration with researchers in the least developed countries and in lower middle income countries is of central importance in development research. It is needed to understand the differing contexts, to enable relevant questions to be formulated, and to implement relevant research of high quality and with opportunities to contribute to positive development of policies and practices.

The research processes themselves are also of great importance. Mutual learning is central. Development research contributes to increased understanding of complex problems, and to enabling mutual accumulation of knowledge and competence that can illuminate and highlight different perspectives in international policy contexts, for example on global health issues and in climate negotiations. It also contributes to internationalisation, and to researchers in countries with limited research resources being able to participate in international research collaborations to a greater extent, by establishing contacts and collaborations.

Development research is therefore needed both to promote and to accumulate knowledge about sustainability issues and the fight against poverty, and also to contribute to developing capacity through collaboration.

Through international collaboration, development research also contributes to research questions being asked, formulated and answered in contexts that are more free from local political direction and priorities than might otherwise be the case. In this way, it contributes to building up academic freedom and creating universities and other education institutions that are less subject to political direction, which is of central importance not least in weak and fragile states. Collaboration improves the ability to ask relevant questions, and increases the understanding of contexts where the results are to be implemented. Through collaboration, development research also contributes to open science and open data, so that the research and its results can be disseminated and become accessible to more people.

For junior researchers in the least developed countries and lower middle income countries, it is crucial for their continued careers that they have opportunities to continue doing research after they have been awarded their doctoral degrees. Collaboration in international projects with established researchers from several countries is hugely important for getting support and building up their own contacts and networks during the important postdoc period. International collaboration also contributes to opportunities for junior researchers to freely select research questions, independently of university and institute managements, and independently of political priorities.

Without specific funding for development research, there is a great risk that researchers at Swedish higher education institutions (HEIs) choose not to seek collaborations with researchers in countries where the research infrastructure is weak and risks of various kinds are great. Basic research, funded in open competition in broad-based calls, are only to a limited extent focused on the complex problems related to the fight against poverty and for sustainable development in the least developed countries and regions. Targeted, challenge-driven calls for research proposals relate in the first instance to European issues, despite development in the least developed countries and lower middle income countries and regions being absolutely central for the realisation of Agenda 2030.

3.2 Development research at the Swedish Research Council

3.2.1 Focus, funding and organisation

Development research at the Swedish Research Council aims to strengthen Swedish research of high quality and with particular relevance to the fight against poverty and for sustainable development. The research support is funded via Sweden's international development aid, where the goal is to create preconditions for better living conditions for people living in poverty and repression. The support shall be used according to the OECD's definition of development aid. Development research within the Swedish Research Council is part of the Swedish Government's support for development collaboration in research for the fight against poverty and for sustainable development. SIDA, the Swedish International Development Cooperation Agency, is responsible for the other part, which includes interventions aimed directly at the least developed countries and some lower middle income countries.

Development research funded by the Swedish Research Council spans the entire scientific field, is often interdisciplinary, and includes both directly policy-relevant and applied research as well as more basic research, which might be useful in the longer term.

Support for Swedish development research was transferred from SIDA to the Swedish Research Council in 2013. There were two expressed purposes for the transfer. The first was to ensure the quality of review was on a par with other research funding from the governmental research councils. The second purpose was to integrate development research more clearly in the broader research landscape, and in this way to also attract new researchers to the field and encourage new research clusters.

The government funding for development research is provided by the Ministry for Foreign Affairs. According to its appropriations document, the Swedish Research Council manages the funds according to Appropriation 1.1 Development Aid Activities, Appropriation 40 Development research, paid in part to the Swedish Research Council. Up until 2014, the appropriation was for 170 million SEK per year, including a maximum of 4 million SEK for administration costs (this also includes the review process for applications). The appropriation was reduced to 165 million SEK per year during 2015–2017, but was reinstated at the previous level in 2018. In 2020, the appropriation was increased to 185 million SEK, and in 2021 the ceiling for administration costs was raised to 4.5 million SEK.

The use of funding during the appropriation item 'Development Research' in the appropriation document relating to the Swedish Research Council's activities is governed by the Government's strategy for research collaboration and research in development collaboration. For the years 2015–2021 (UF2014/80398/UD/USTYR), the strategy meant that the Swedish Research Council's activities in the area should cover the following parts:

- strengthened high-quality research in Sweden of relevance to the fight against poverty and for sustainable development in low income countries
- strengthened knowledge exchange and collaboration between researchers in Sweden and researchers in low income countries and lower middle income countries, focusing on research of high quality and relevance to the fight against poverty and for sustainable development.

On 9 June 2022, the Swedish Government adopted a new strategy for development collaboration in research into the fight against poverty and for sustainable development for 2022–2028 (UD2022/09061). The new strategy means that the Swedish Research Council’s activities in the area shall cover:

- strengthened Swedish research of high quality and with particular relevance to the fight against poverty and for sustainable development.

This is one of the four complementary target areas of the strategy, which are intended to be mutually supportive. The three other target areas, for which SIDA is responsible, are:

- strengthened research capacity and sustainable research environments
- strengthened global, regional and national research of relevance to the least developed countries and regions
- strengthened impact of research of relevance to the fight against poverty and for sustainable development.

The Swedish Research Council’s Committee for Development Research consists largely of active researchers. The Committee is responsible for allocating research funding, and for following up and evaluating research within the research field. The Committee also decides on the calls to be issued within development research, produces strategic plans for the research field, and develops the activities.

3.2.2 Calls and grants awarded

In addition to project grants and network grants, for which calls were issued annually during the period 2013–2022, calls have been issued for four other grants: international postdoc grant, starting grant, grant for intersectoral graduate schools, and project grant in “Sustainability and Resilience” (SaR).

Through dialogues with the research community, including a survey in 2018, the Committee identified a need for improved career paths in development research. Calls for postdoc grants have been issued since 2019, to give researchers with newly awarded doctoral degrees linked to Swedish universities the chance to expand their networks and their competences, and to safeguard growth of the field. Increased opportunities for researchers with recent doctoral degrees to do research in the least developed countries and in lower middle income countries also contributes to the increased internationalisation of Swedish research. In 2022, a call for a starting grant was issued for the first time, to make it easier for junior researchers to carry out full-scale research projects.

Intersectoral graduate schools was a new type of call in development research, and was introduced in 2021. The purpose is to build up interdisciplinary and

broad research environments, particularly for doctoral students in development research. The graduate schools are expected to contribute to collaboration between different environments and to interdisciplinarity, which in turn will generate knowledge of the highest quality and relevance to Agenda 2030. They also contribute to collaboration between Swedish higher education institutions (HEIs) in development research, as at least three HEIs shall back an application, together with at least one HEI from a low income or lower middle income country.

The calls designated as Sustainability and Resilience (SaR) in 2016 and 2018 were special in several ways. Firstly, they had a certain – albeit broad – thematic delimitation (in climate and environmental change, sustainability and resilience in low income countries) and, secondly, they were based on co-funding with other public agencies. The call for SaR1 was issued in 2016 in collaboration between the Swedish Research Council, Formas and SIDA, and the call for SaR2 in 2018 also included Forte in the collaboration.

The calls were justified by the then recently adopted Agenda 2030 and the fact that the Agenda is global and requires joint efforts. The project grant amounts in the SaR calls were larger than in the Swedish Research Council's open calls, and had clearer requirements for collaboration with and resources to junior researchers and co-applicants from low income or lower middle income countries. In 2016, 10 project grants under SaR1 were awarded and, under SaR 2, 16 project grants were awarded in 2018.

An evaluation of SaR1 was carried out in 2020–2021. This showed that the call has successfully supported research of great potential for societal impact and of high relevance to Agenda 2030. Most projects worked well in terms of equal partnerships with researchers in low income and lower middle income countries. Junior researchers took part in all projects in accordance with a requirement in the call (7 out of 10 project leaders were junior researchers), and there were a number of examples of how junior researchers' career opportunities have improved.

As the outcome of the SaR calls was very good, they can very well serve as a model for stimulating more equal collaborations between Swedish researchers and colleagues in the least developed countries, and for training a new generation of development researchers. The Committee for Development Research is positive towards issuing more, similar calls in collaboration with other public agencies, which is also part of the new strategy from the Government.

Since the Committee for Development Research was formed in conjunction with the transfer of responsibility for development research to the Swedish Research Council in 2013, 323 project grants, 253 network grants, 10 postdoc grants and 3 grants for graduate schools have been approved. See Figure 1 for a summary of how the funding has been allocated between the grant forms during 2014–2022.

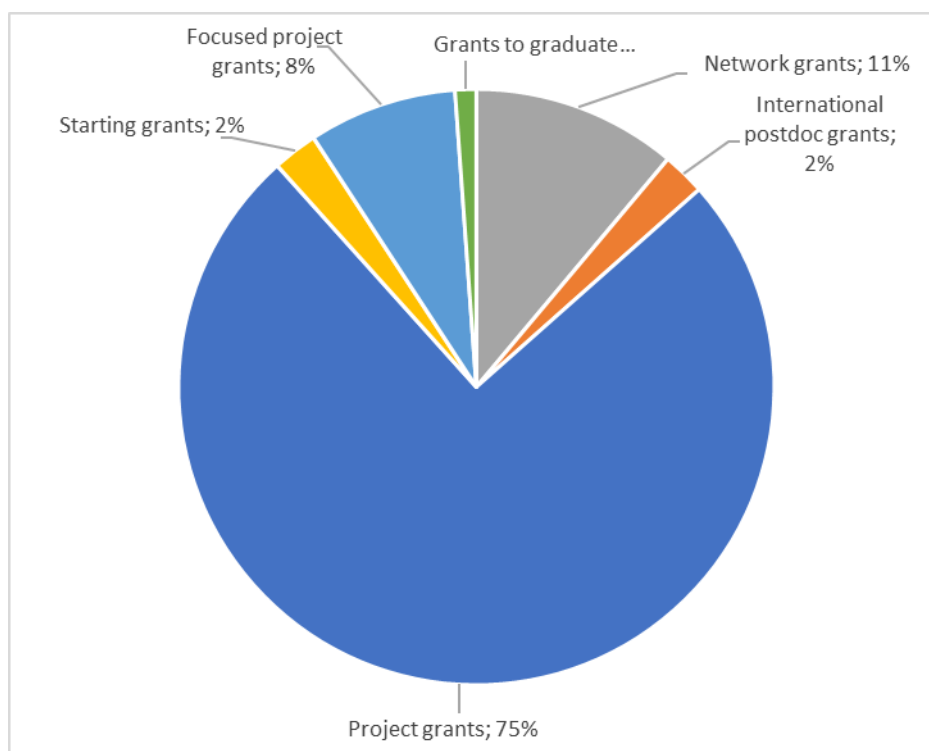


Figure 1. Percentage of total amount awarded per grant form in development research, 2014–2022. Undirected project grants are awarded around 75 per cent of the funding. The percentages for other grant forms have varied over the years, depending on the calls that have been issued. Calls for undirected project grants and network grants were issued during 2014–2021, project grants focused on “Sustainability and Resilience” in 2016 and 2018, international postdoc grants during 2019–2022, grants for graduate schools in 2021, and starting grants for the first time in 2022.

Thematically, the research displays a great range. Applications within development research are currently dealt with by review panels in three separate scientific fields: humanities and social sciences, global health, and natural, engineering and environmental sciences. A review of subject designation, defined as the first SCB/Statistics Sweden code stated in applications, shows a great subject spread and a relatively even distribution of grants between these scientific fields. However, it is noticeable that the number of projects within humanities is very small. The Committee has followed this up, and since 2021 it has clarified, in conjunction with calls and other communications, that applications in humanities are welcome. Interdisciplinary projects, that is, projects that have stated SCB/Statistics Sweden codes from at least two different over-arching scientific fields (the first digit of the SCB/Statistics Sweden code), had a slightly higher approval rate than the average during 2014–2021.

Analyses during 2022 show that the average number of participating researchers in applications has increased continuously since 2015. In 2021, the average number of participating researchers per application was 3.3. Furthermore, the percentage of international participating researchers has been comparatively high in development research. During the last three years (2019–2021), the number of international participating researchers was even higher than the

number of Swedish participating researchers in applications received for project grants. See Appendix 1 for a mapping of participating researchers per country in applications during 2014–2021.

The Committee is working on further developing the support for development research via a clearer link to Agenda 2030. In a survey from 2018, the main applicant for grants awarded in 2013–2017 was asked about the relevance of the research carried out for the sustainable development goals. In 2021, the links to Agenda 2030 were also analysed for all grants during 2016–2020 using key word searches. The results from the two investigations and the information in the applications show that the grants awarded within development research 2013–2017 in total are relevant to all the 17 goals within Agenda 2030.

Since 2018, applicants are required to state the relevance to the sustainable development goals in the application form, which enables a simpler and more precise follow-up of the link between projects and Agenda 2030. Figure 2 below shows the first goal (of three possible) stated for all applications approved during 2018–2020. The goal stated most frequently by far (63 applications) is goal No 3, Health and well-being. One explanation for this is that nearly all applications to the review panel for medicine and health can be assumed to be relevant for this goal, while the applications to other review panels are divided up across several goals.

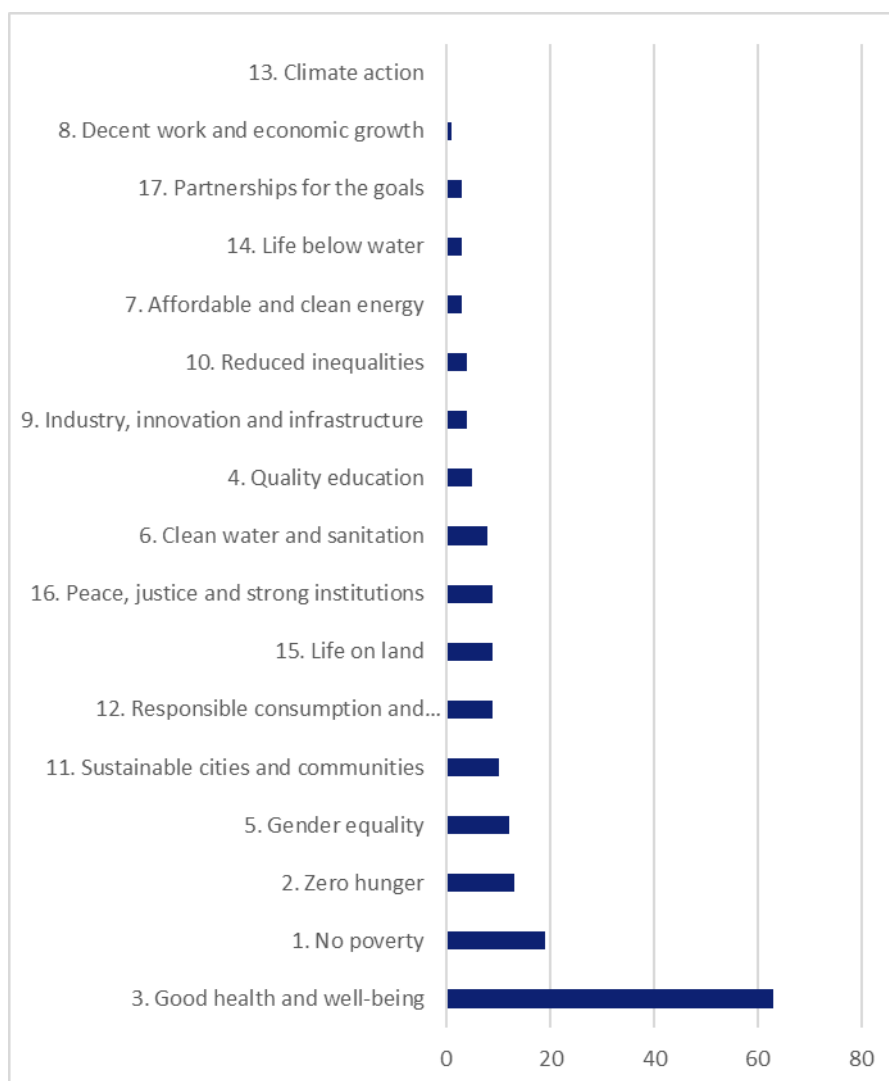


Figure 2. Number of approved applications for all calls, apart from international postdoc, in development research (2018–2020) in relation to Agenda 2030. The data is based on the sustainable development goals the applicants have stated as the most relevant for their particular application (that is, the first goal stated out of three possible).

Projects and networks have involved more than 80 countries. Countries in East Africa dominate among the collaboration and relevance countries, for both project grants and network grants (see fact box). For project grants, there is no limitation in relation to collaboration countries. On the other hand, the project must state for which least developed countries or lower middle income countries they are relevant, or if they are relevant for low income countries in general. The collaboration countries for network grants cover least developed countries and lower middle income countries.

Facts: Relevance countries and collaboration countries

Top 5 relevance countries for approved project grants 2019–2021:

1. Tanzania
2. Uganda
2. Ethiopia
4. Mozambique
5. Bangladesh

Top 5 collaboration countries for approved network grants 2019–2021:

1. Kenya
2. Uganda
3. India
4. Tanzania
5. Egypt

The Committee continuously monitors gender equality in the outcomes of grant decisions. The approval rates have varied over the period 2014–2022. With the exception of 2020, female researchers applying for undirected project grants have had a higher approval rate than male researchers (Figure 3). In 2021, the number of applications was almost equal between genders: 97 applications from women, and 98 from men. The approval rate for women was higher, however: 23 per cent compared with 16 per cent for men. The difference in approval rates is greatest among junior researchers with a career age of up to seven years.

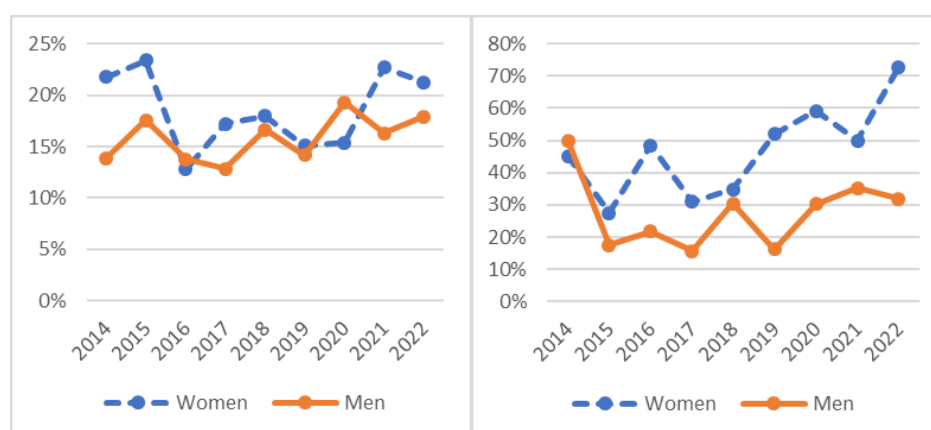


Figure 3. Approval rate for project grants (left) and network grants (right) per gender, 2014–2022.

There is also a clear pattern for network grants of higher approval rates for female applicants (Figure 3), although this relates to relatively few grants per year, and the approval rates vary relatively strongly between years. Contrary to what applies for project grants, men have on the other hand applied for network grants to a considerably greater extent than women throughout the period 2014–2021. The difference in the approval rates between genders was investigated in a

limited analysis of calls during 2017–2019. The analysis does not show any systematic difference in the grading of different criteria, links to higher education institutions or in statements. Male applicants were over-represented among the lowest ranked projects.

Just as for project grants, the difference between the genders is considerably higher for junior researchers. For established researchers, however, the approval rate in 2021 was higher for men than for women. The Committee will continue following up network grants. Underlying trends in development research cannot be excluded as an explanation for the greater success of young female applicants in particular. The data series for postdoc applications and graduate schools are so far too short to enable analysis of the approval rates in greater detail.

In the review process, gender equality aspects are dealt with according to the Swedish Research Council's guidelines, for example when appointing review panel members, in the training and information to members and during the review panel meetings, as well as in the reporting. The issue of the extent to which sex or gender perspectives are included in the content of the research – where applicable – has also been weighed into the assessment of applications since 2018.

3.2.3 Researchers' views on the grants and conditions for development research

In 2022, a survey was carried out that was sent to all recipients of grants for development research from the Swedish Research Council during 2016–2021, except some whose email addresses did not work. The survey covered questions about the driving forces behind conducting development research, the most important scientific advances, and the challenges associated with their research. The survey also included questions relating to the greatest challenges to conducting development research, the changes that would be needed to facilitate the research, the links to Agenda 2030, and how the COVID-19 pandemic had affected activities. A total of 178 researchers responded to the survey, giving a response rate of 51 per cent. The survey consisted mainly of multiple choice questions, where the respondents could state up to three alternatives, but the option of providing free text answers was also available. The results from the survey, summarised in Appendix 1, will be used for the continuing work of the Committee.

The most common driving force behind conducting development research was to “work towards equality and sustainable development”, stated by 67 per cent of the respondents. In answer to the question of what had been the most important advances for each respondent's field within development research in the last five years, 75 per cent answered “scientific results” and 56 per cent answered “improved collaboration among researchers”. 77 per cent answered that collaboration partners in low income and lower middle income countries took part in the projects as equal research colleagues. In most projects, they played an important part in the work of formulating context-based research questions.

The free text answers often emphasised that collaborations with researchers and departments in low income and lower middle income countries have developed the research capacity in these countries. Although this is not an expressed goal of the Swedish Research Council's support of development research, this positive effect is worth noting. Just over 70 per cent also answered that this is one of the most important mechanisms for how their research contributes to societal development in low income countries. It can be compared with 57 per cent answering "knowledge production in general" and 47 per cent "through local/national policy" to the same question. The free text answers also included examples of societal impact in low income and lower middle income countries, for example improved maternal care, better secured food supply, countries being able to start exporting products through improved quality control, and research into pollen biology being expected to improve agriculture.

There was strong support for larger and longer projects, both in the multiple choice question and in the free text answers, although some pointed out the risk of this leading to a lower approval rate. This is in line with the results of a similar survey carried out in 2018. The greatest challenges of conducting development research were stated as funding issues, project periods that are too short, and practical difficulties of working in and with low income and lower middle income countries. In line with this, 67 per cent stated that they wanted larger project grants, and 57 per cent wanted longer grant periods, to improve the conditions for development research.

Many respondents saw network grants as a good tool for stimulating new collaborations and research projects, and this was shown both in the answers to the multiple choice questions and in the free text answers. Only 18 per cent did not see any great value in network grants for themselves. However, there is a clear demand – which has also been recurring in dialogues with researchers – for the ability to fund salaries within the call, which is currently not possible. The Committee has started to look at the preconditions for this.

The project leaders were also asked what they thought about using Agenda 2030 as a framework for development research. 55 per cent thought that Agenda 2030 was useful as a framework, for example in international collaboration, and 41 per cent thought that it would simplify the funding and communication of the research. Almost one quarter, however, thought that if researchers have to relate to the wording of the Agenda 2030 goals, this might limit their academic freedom. Examples of both risks and advantages were provided in the free text answers, and a couple of respondents also described Agenda 2030 as a relatively general and policy-focused action plan that does not add anything to research at project level.

It is also worth noting that the COVID-19 pandemic is regarded as having changed how projects will be conducted also in the long term. Project will not just reduce their climate impact by digital meetings to some extent replacing travel (59 per cent answered so). According to the answers to the multiple choice questions, many projects will also be conducted in a different way generally (49 per cent), for example through changed roles in the projects (20 per cent).

3.2.4 Bibliometric analysis

Equal research collaborations are emphasised to an ever increasing degree in development research. Co-publication and different – possibly unequal – roles in co-publication are some of the questions and fears that are often highlighted. To contribute knowledge about this issue, an analysis of co-publication patterns has been carried out. Detailed data from the analysis are presented in Appendix 3. It should be observed that the bibliometric analysis has not been able to distinguish development research funded by the Swedish Research Council from research funded by other bodies.

The analysis covers the ten countries that are most often stated as collaboration countries in development research projects funded by the Swedish Research Council. These countries are:

- Bangladesh
- Ethiopia
- India
- Cambodia
- Kenya
- Malawi
- Mozambique
- South Africa
- Tanzania
- Uganda

Swedish co-publications with the ten collaboration countries have been searched for in Web of Science. Based on these publications, the following statistics have been produced:

- number of publications per country
- number of publications with “corresponding author” and main author from each country
- subjects
- number of publications thanking the Swedish Research Council.

In summary, there is a strongly growing trend of co-publications with most of the countries, with some clear exceptions: Mozambique, Malawi and Cambodia. There are almost the same number of co-publications with South Africa as there are with India.

The ambition of the study was to compare co-publication patterns, in order to contribute to understanding whether there is wide-spread inequality in co-publication. This was done by producing data for numbers and percentages of main authors of co-published articles between Swedish researchers and researchers in the ten co-publication countries. The percentage of main authors working in Uganda, Tanzania and Ethiopia is high at 39 per cent. It is also high for Mozambique and Bangladesh, with more than 30 per cent. The percentage is, however, markedly lower in Malawi and Cambodia.

To investigate the importance of the Swedish Research Council for the scientific articles co-published by Swedish researchers and researchers in the ten countries, the percentage of publications including “thanks to the Swedish Research Council” was analysed. The percentage is highest for Bangladesh (35 per cent), South Africa (33 per cent) and India (30 per cent). In the other African countries it is 20–30 per cent, and in Cambodia only 18 per cent. It is probable that projects within and funded by SIDA’s bilateral research capacity development programmes constitute a large part of the co-publications with the countries that are or have been programme cooperation countries.

The large number of co-publications with authors from India and South Africa who thank the Swedish Research Council indicate that these cannot only be based on the Swedish Research Council’s funding of development research, which is limited, but are also based on other funding from the Swedish Research Council. For the other countries, only 20–30 per cent of the co-published articles are funded by the Swedish Research Council. Funding from the Swedish Research Council’s funding of development research probably forms a large part of this funding, as does SIDA’s funding of bilateral capacity development programmes, with heavy emphasis on third cycle higher education.

3.2.5 Other mapping of Swedish development research

In 2020, the research network SweDev carried out [a mapping of Swedish development research](#), published by the Expert Group for Aid Studies. It found that Swedish development research is expanding and including ever more scientific disciplines. A follow-up study in 2021 ([Increasing the use of research in Swedish development policy and practice by Ioannou and Vähämäki](#)), drew the conclusion that there is a need to develop this further.

3.2.6 Relevance

The particular relevance of the research to the fight against poverty and for sustainable development in the least developed countries and some lower middle income countries defines the research field of development research. The relevance criterion and its definition is therefore entirely central to development research. The management of the relevance criterion has been discussed by the Committee for several years, and the difficulty of assessing the particular relevance has also been pointed out by review panels and members of the review panels. To ensure the relevance criteria is fulfilled in the best possible way and the assessment is done in a standardised way, the Committee has repeatedly reviewed and developed the relevance assessment during the period. The Committee has also considered the interpretation of the wordings included in the Government’s strategy and appropriation document.

This has, for example, concerned finding a balance between defining and clarifying the relevance criterion and the assessment of this, and at the same time not excluding any methodological approaches or limiting the freedom of the researchers in terms of choice of scientific field, time perspective and innovative thinking. Development research is delimited to being based on phenomena that are specific for contexts in the least developed countries, and to be particularly

relevant to the fight against poverty and for sustainable development. In other respects, development research is independent. In this way, independent researcher-initiated research is safeguarded and delimitations of disciplines and methods are avoided, at the same time as the research field is clarified and the relevance to the fight against poverty and for sustainable development is safeguarded.

4 Challenges and development opportunities

Development research spans a large range of disciplines and research fields, and in this respect faces the same challenges as other research. To these are added challenges, but also development opportunities, which are specific for development research in particular.

4.1 Societal impact and utilisation

Development research of the highest scientific quality aims to generate research results that are relevant to the fight against poverty and for sustainable development. It is important that the research results are utilised, both in the relevant countries and regions, in Swedish organisations and companies, and in Swedish and global policy. Methods and tools for promoting the impact of the research need to be developed further. These might consist of pure communication activities, but also of implementation, utilising researcher networks, development of methods for integrating research results in policy processes and of strengthening the link between research and innovation. Collaboration between actors already during the planning of the research may be one step towards this, as well as research into knowledge implementation.

Embedded research is another option that entails using research to follow up implementation initiatives, which thereby directly links research to implementation and impact. Increasing embedded research in development research as a method for project follow-up could cause the results from the initiatives to get a far wider distribution. This type of research can contribute to developing relevant questions, applications and distribution routes for new knowledge. It can also contribute to local universities and other actors becoming involved in a joint learning process, to dissemination of knowledge and, not least, to the problematisation of different types of development initiatives.

4.2 Protect the independence and freedom of research

In many countries, the freedom and independence of research is threatened or severely limited. There is currently a global development towards more authoritarian states. It is therefore of great importance that the independence and freedom of research is safeguarded.

For many researchers who take part in research collaborations in development research, this is a very topical reality. Global research collaborations can contribute to maintaining strong research, and to counteracting limitations on the independence and freedom of research. Opportunities for funding from international collaboration partners can be of the greatest importance for directing one's own research agenda. Development research therefore plays an

important role in contributing to increased academic freedom in collaboration countries.

4.3 Open science

Many areas of development research lack data. Data collection is therefore extra important. At the same time, data collection may be a great challenge, as the research infrastructure is weak in many countries. Another challenge is that researchers in the collaboration countries often have poor access to digital journals and publication databases.

The lack of data in many areas gives development researchers a particular responsibility to ensure that data collected is made openly accessible, and that this is done based on applicable regulatory frameworks. Research ethics issues linked to the design of investigations and the collection of data and to the management of data and publication of research results are central in development research. The Swedish Research Council's terms and conditions for projects approved relating to publication with open access and the production of data management plans are important for ensuring good management.

4.4 Good preconditions for interdisciplinary projects

Development research covers both intradisciplinary and interdisciplinary research. To answer many of the big questions in development research – not least those linked to sustainable development – broad-based approaches that span several disciplines are vital. Research aiming to reduce poverty and contribute to the global sustainability goals needs to include questions relating to synergies and conflicts between different goals. The research can, for example, include both complex bio-physical as well as social systems and processes that stretch across national borders. In this way, Swedish development research can contribute to addressing a global need for knowledge, and at the same time, through international collaboration, develop the research capacity and contribute to reduced poverty and more sustainable development in the relevant countries and regions.

Interdisciplinary projects place particular demands on funding, as they often require larger research teams and longer project periods. Interdisciplinary projects also risk falling between stools in discipline-based review panels, and it is therefore important to ensure that interdisciplinary projects have the same opportunities as intradisciplinary projects in the scientific assessment. The Committee for Development Research is working continuously to develop and improve its processes to achieve this.

4.5 More comprehensive and more equal collaborations

More equal collaborations between researchers in Sweden and researchers in the least developed countries is important. This means that all researchers involved jointly contribute to formulating questions, data collection, analysis and

scientific publications in an equal manner. Equal collaborations are important for increasing the quality and relevance of the research, and they are also of importance for research ethics. The striving towards equal collaborations between Swedish researchers and researchers in the least developed countries and some middle income countries is highlighted in the Government's new strategy for Sweden's development collaboration in research.

Equal collaborations Collaborations – both between researchers and between researchers and actors outside academia – should be established at an early stage, so that the role allocation and expectations of project results are clarified right from the start. Financial resources should be allocated in an equitable way between the researchers in the different countries in relation to their role in the project and the costs for each partner.

Research collaboration that is more equal often requires a larger project budget, to ensure that all parties to the project receive remuneration for their work input. The Committee for Development Research is investigating opportunities for co-funding from SIDA and/or other research funding bodies. A long-term vision is collaboration with regional and/or national research councils in the relevant countries and regions. Collaboration projects in development research, where a significant part of the funding relates to research carried out by researchers in the least developed countries and some lower middle income countries, would be desirable. Given a sustainable format for co-funding between the Swedish Research Council, SIDA and other research funding bodies, the Swedish Research Council could – during an interim period – administer calls and assessment of applications for such projects.

As described in Section 4.2.2, the SaR (Sustainability and Resilience) calls in 2016 and 2018 had clear requirements for collaboration with and resources to junior researchers and collaborators from low income or lower middle income countries. This could serve as a model for stimulating more equal collaborations between Swedish researchers and colleagues in the least developed countries, and for training a new generation of development researchers.

Although collaboration is desirable in most projects in development research, there may be exceptions where collaboration could limit the freedom of the research, for example in countries where academic freedom is limited.

4.6 Opportunities for extended project periods

Building up research is often a long-term project, for establishing research networks with national researchers, establishing infrastructures for data collection, and enabling the research to develop over time. It takes time to plan and carry out development research in the least developed countries and lower middle income countries, in particular when it is based on field work and collaboration between actors.

As from 2022, it is possible to apply for four-year project grants in development research, but with the same maximum total grant amount as for three-year

projects. There is reason to follow up whether this affects the implementation in a positive way. Longer project periods could also be valuable to promote co-creation/co-design, which is often time-consuming. Calls for larger project grants (for example 2 million SEK per year) over a longer period (4–5 years) could enable this.

4.7 Junior development researchers

Regrowth of the supply of junior researchers in development research is weak, in particular in some areas. This is worrying. It is therefore important to investigate what type of initiatives can contribute positively to researchers being able to establish themselves in development research at an early stage of their careers. Possible ways forward could be targeted calls and continued development of interdisciplinary graduate schools.

4.8 Collaboration with other research funding bodies

In a globalised world, where the West's share of the total population and total gross national product is continuously shrinking, development issues in a broad perspective are becoming ever more central. This applies not least to questions and challenges linked to the UN's sustainable development goals. Development in fast-growing least developed countries and lower middle income countries is entirely crucial for how the sustainable development goals can be fulfilled, for example. At the same time, it is in these countries that the greatest challenges can often be found, linked to issues such as antibiotic resistance and seriously threatened biodiversity.

The Swedish budget for development research is limited. Collaboration with other research funding bodies, nationally and internationally, is of the greatest importance for contributing to increased funding for the area, but also for linking development issues to other research fields. This is a development that is encouraged in the Government's strategy for development collaboration in research. It is therefore particularly important that development issues are not just managed within dedicated calls for development research, but are instead better integrated into the broader research funding than is the case today. The pandemic has further underlined the need for research that integrates development perspectives into a very broad range of scientific fields and questions.

There are some examples where the Swedish Research Council supports calls made jointly with other European and international funding bodies. The Swedish Research Council recently took part in a call together with Belmont Forum on the theme of migration and environmental change. There are also examples where Sweden, via SIDA, supports joint calls with other donors. One such example is JPIAMR, the Joint Programming Initiative on Antimicrobial Resistance. SIDA contributes funding to JPIAMR in order to reach researchers in the least developed countries in sub-Saharan Africa. Another initiative in

collaboration with the EU is EDCTP, the European and Developing Countries Clinical Trials' Partnership.

5 Recommendations

5.1 Relevance and impact of development research

Development research at the Swedish Research Council covers both basic and more applied research, and spans all disciplines. A common feature of the research is that it is of particular relevance to the fight against poverty and for sustainable development in least developed countries. The relevance might be short term or long term, at local level or in global policy. A crucial factor is that the research has impact.

The Committee for Development Research recommends that methods and tools for promoting the impact of research are developed and made accessible within the framework for the Swedish Research Council's development research and in collaboration with other funding bodies, to ensure the results of the research will be utilised, both in policies and in practice. This could also include formulating research questions together with problem owners.

5.2 Academic freedom

Considering the situation in the world in terms of freedom and independence of research, the Committee recommends a strong focus on issues relating to academic freedom in development research. When the freedom of research is threatened by authoritarian states, it is important for politicians, research funding bodies and university managements to emphasise that the research must be independent and free from outside agendas. Here, there is an opportunity for Sweden to use its research collaborations to make a stand for academic freedom and to support researchers in less free countries to freely formulate research questions, and to carry out and publish research.

5.3 Open access

Making research results and data accessible via open access is central for development research and for the opportunities for development researchers to collaborate on equal terms. In many collaboration countries in development research, access to data and publications is limited. The Committee for Development Research therefore recommends that the Swedish Research Council and Swedish higher education institutions continue to work towards open access to publications, research results and data. The Swedish Research Council should continue to develop this, both in its own terms and conditions and procedures for different types of research grants, and also in its channels for collaboration and research policy advice.

5.4 Interdisciplinary approach

Many of the questions that are central to development research of relevance to the fight against poverty and for sustainable development require interdisciplinary or multidisciplinary approaches. This applies not least to research to support the work on the UN's sustainable development goals when implementing Agenda 2030. Interdisciplinary research often requires larger research teams and longer project periods. For this reason, it is important to ensure there are preconditions for this in calls issued in development research, for example by ensuring budgetary room for larger and longer projects than allowed by the current project grants.

5.5 The preconditions of research

Collaboration and interaction on equal terms between researchers in different countries are central factors for development research. More equal collaborations with researchers in the least developed countries and certain lower middle income countries are important, both from an ethical perspective and for strengthening the quality and relevance of the research. Interaction should occur already when research ideas and research questions are being developed, and should continue throughout the research and publication process. Equal collaboration requires resources, not least when it is with countries that often lack basic funding for research. It is therefore of the greatest importance that this is taken into account when determining the budget for development research.

Collaboration does not just require financial resources, but also time. For development research, which is often based on field work and interaction between many actors, it is very important that the option of longer project periods and long-term planning is available. Long-term funding can also contribute to promoting more active work with the impact of the research.

The Committee for Development Research has identified a need to ensure that new generations of researchers join the scientific field. It is therefore very important that there is budgetary room, over and above project grants, to offer specific support to development researchers in the early stages of their careers, through specific grant forms and targeted calls.

5.6 Funding body collaboration

The Committee for Development Research considers that development research has much to gain from different actors collaborating and uniting their strengths to reinforce and develop the research field. This can, for example, be in the form of joint calls where several funding bodies join together in thematic calls. The Committee sees opportunities for collaboration primarily with SIDA's research and capacity development programme, but also with other national and international research funding bodies, as well as research councils in relevant countries and regions. The Committee, with the support of the Swedish Research Council, will work towards finding formats for these collaborations.

Broadened funding is also central for reaching the goal of more equal research collaborations, and the Committee therefore wishes to investigate opportunities for joint funding by the Swedish Research Council and SIDA in a format where individual researchers from Sweden and researchers from one or several relevant countries can jointly apply for grants.

Appendix 2: Result of survey, April–May 2022

All main applicants awarded funding in development research during 2016–2021 (348 persons) were included in the survey. The response rate was 51 per cent (179 responses). The text responses are not included here.

Career age. Number of responses, percentage in brackets.

Career age	Number of responses
Completed a doctoral degree no more than 2 years ago	5 (3%)
Completed a doctoral degree 2–7 years ago	32 (18%)
Completed a doctoral degree more than 7 years ago	142 (79%)

Gender. Number of responses, percentage in brackets.

Gender	Number of responses
Female	82 (46%)
Male	94 (53%)
Don't wish to answer	1 (1%)

***Most important advances, up to 3 in number. Number of responses, percentage in brackets.
(In your opinion, where have the most important advances of relevance for your development research area been made within the last 5 years?)***

Most important advances	Number of responses
Scientific results (new insights, findings, understanding, discoveries)	132 (75%)
Methods development/approaches to research	93 (53%)
Enhanced collaboration among researchers	98 (56%)
Communication of research results	34 (19%)
Implementation of research results	35 (20%)

***Societal impact, up to 3 in number. Number of responses, percentage in brackets.
(Through what mechanism/s does your development research impact societal development (contribute to better living conditions and sustainable development in low-income countries)?)***

Mechanism/s for impact on societal development	Number of responses
Products, technology and bio innovation	45 (25%)
Social and societal innovation	39 (22%)
Global policy	35 (20%)
Local/national policy	84 (47%)
Capacity-building at collaborating institutions	127 (71%)
More efficient use of development funding	17 (10%)
General knowledge production	102 (57%)
Likely not contributing	1 (1%)

Reasons for conducting development research, up to 3 in number. Number of responses, percentage in brackets. (What are your primary incentives for conducting development research?)

Primary incentives for conducting development research	Number of responses
Contributing to poverty eradication	68 (38%)
Working for equality and sustainable development	121 (68%)
Filling knowledge gaps/complementing knowledge	102 (57%)
Exciting research questions	90 (50%)
Research exchange	34 (19%)
Research capacity building	77 (43%)

Scientific impact, up to 3 in number. Number of responses, percentage in brackets. (What do you see as the main research (scientific) challenges in your area of development research?)

Main scientific challenges	Number of responses
Theoretical/scientific challenges	66 (37%)
Lack of data/poor data	77 (43%)
Methodological difficulties	72 (40%)
Communication/dissemination/adoption of research results	82 (46%)
Don't know	13 (7%)

***Challenges and barriers, up to 3 in number. Number of responses, percentage in brackets.
(Which are the main challenges/barriers in conducting your development research?)***

Main challenges/barriers	Number of responses
Funding issues	110 (62%)
Too short project periods	83 (47%)
University structures and bureaucracy in Sweden	64 (36%)
Collaboration with international partners	13 (7%)
Practical constraints working in and with low income or lower middle income countries	73 (41%)
Institutional barriers	21 (12%)
Insufficient research capacity in low income or lower middle-income countries	35 (20%)
No major challenges	8 (5%)

***Conditions for conducting development research, up to 3 in number. Number of responses, percentage in brackets.
(In your view, what is needed to improve the conditions for development research in Sweden?)***

Conditions for development research in Sweden	Number of responses
More funding/larger projects	119 (67%)
Types, terms and conditions of grants/funding	48 (27%)
Institutional/administrative changes	42 (24%)
Longer projects/more time	102 (57%)
Better research career opportunities	45 (25%)
Changes to review and granting process	20 (11%)
Policy changes	10 (6%)
Promote exchange/networking within development research	48 (27%)

***Benefits of network grants, up to 3 in number. Number of responses, percentage in brackets.
(Would/do you see a value in a networking grant, such as Swedish Research Links, for your own research? If so, what would it primarily be?)***

Value of a networking grant	Number of responses
Establish myself within development research	48 (27%)
Facilitate preparations of a project	116 (66%)
Knowledge exchange	116 (66%)
No significant value for me	32 (18%)

***Interdisciplinary and multidisciplinary research, up to 3 in number. Number of responses, percentage in brackets.
(When it comes to trans/multidisciplinary research, please tick the statement/s that you think is/are valid for your research area within development research.)***

Trans/multidisciplinary research	Number of responses
I see an increased need for trans/multidisciplinary research	120 (68%)
It is more difficult to secure funding for trans/multidisciplinary research	75 (43%)
There are still significant institutional and disciplinary barriers for conducting trans-/multidisciplinary research.	101 (57%)
There are no particular problems with conducting trans/multidisciplinary research.	26 (15%)

Agenda 2030 as a framework for the research, up to 3 in number. Number of responses, percentage in brackets. (What is your opinion on using the 2030 Agenda as a basis/framework for development research?)

Agenda 2030 as a basis/framework for development research	Number of responses
It provides a useful framework in e.g. international collaboration	95 (55%)
It facilitates in funding and communication of the research	71 (41%)
It limits the academic freedom, by referring to the formulations of the goals	42 (24%)
It makes no difference	40 (23%)

Participating researchers from low income or lower middle income countries, up to 3 in number. Number of responses, percentage in brackets. (What is/are the most important role/s of your collaborating researchers in low income or lower middle income countries?)

Role/s of your collaborating researchers	Number of responses
Working on equal terms as peers	136 (77%)
Formulation of context-based research questions	124 (71%)
Provision of context	67 (38%)
Access to data	68 (39%)
Access to policy	22 (13%)

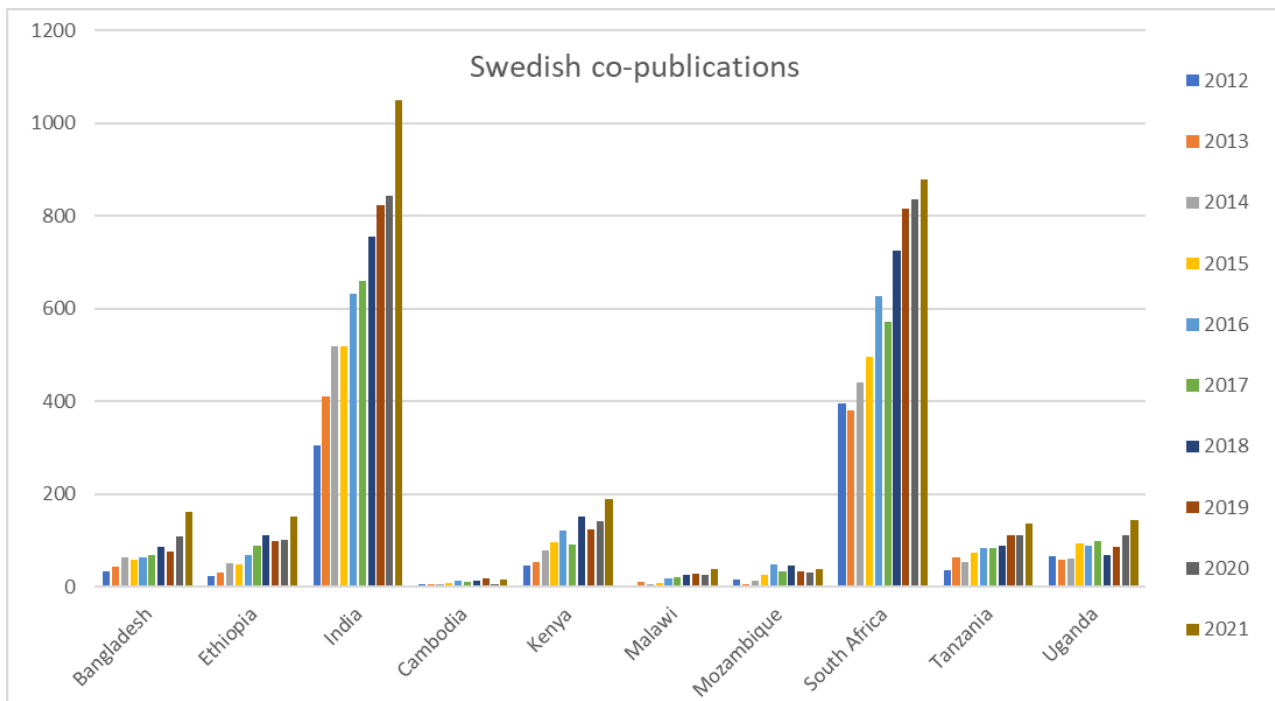
Effects of COVID-19, up to 3 in number. Number of responses, percentage in brackets.

(Do you think that the covid-19 pandemic has changed the way your development research is conducted also in the longer term? If so, how?)

Effects of the COVID-19 pandemic	Number of responses
Change of research focus	19 (11%)
Change of roles in collaborations	36 (20%)
Changed ways of conducting projects in general	87 (49%)
Realisation of ways of working with lower climate impact, e.g. through more digital meetings	106 (60%)
No significant changes	38 (21%)

Appendix 3: Bibliometric analysis

Number of Swedish co-publications with each co-publication country.



Number and percentage of “corresponding” and main authors from each country.

Country	Number of publications	Number (percentage) corresponding	Number (percentage) main authors
Sweden	14585	4263 (29%)	4094 (28%)
India	6522	1924 (30%)	1982 (30%)
South Africa	6165	1229 (20%)	1266 (21%)
Kenya	1089	216 (20%)	269 (25%)
Uganda	871	262 (30%)	338 (39%)
Tanzania	836	243 (29%)	323 (39%)
Ethiopia	769	207 (27%)	302 (39%)
Bangladesh	760	170 (22%)	259 (34%)
Mozambique	290	64 (22%)	97 (33%)
Malawi	177	23 (13%)	36 (20%)
Cambodia	97	10 (10%)	17 (18%)

Number of publications per scientific field and country. Publications in Web of Science are divided up into 250 subjects, which in turn are grouped into 16 fields.

Area:	India	South Africa	Kenya	Tanzania	Uganda	Ethiopia	Bangladesh	Mozambique	Malawi	Cambodia	Total
Clinical medicine	1258	1288	325	318	358	286	276	109	84	48	4350
Physics	2389	1875	7	12	5	19	8	1	-	1	4317
Biomedicine	1045	868	285	208	204	154	174	48	25	23	3034
Health sciences	415	696	219	208	295	144	212	44	62	23	2318
Geosciences	546	686	171	117	52	94	90	35	14	7	1812
Biology	263	611	126	101	37	80	27	40	7	10	1302
Engineering sciences	718	317	52	42	39	48	52	20	7	1	1296

Area:	India	South Africa	Kenya	Tanzania	Uganda	Ethiopia	Bangladesh	Mozambique	Malawi	Cambodia	Total
Agronomy	218	235	197	80	81	95	44	53	7	12	1022
Chemistry	641	211	18	11	6	37	45	4	-	-	973
Social sciences	97	417	87	64	41	42	28	16	9	5	806
Materials sciences	583	86	5	2	1	29	15	5	-	1	727
Psychology	55	140	49	7	15	3	13	1	1	-	284
Economics	60	102	30	21	3	24	17	2	2	3	264
ICT	126	47	3	3	2	1	12	1	1	1	197
Humanities	21	103	3	6	4	1	-	-	-	-	137
Mathematics	63	32	6	3	12	7	3	3	1	-	130

Number and percentage of publications including “Thanks to the Swedish Research Council”.

Country	Number of publications	Thank you to the Swedish Research Council – Number (percentage)
India	6522	1989 (30%)
South Africa	6165	2021 (33%)
Kenya	1089	232 (21%)
Uganda	871	185 (21%)
Tanzania	836	197 (24%)
Ethiopia	769	204 (27%)
Bangladesh	760	269 (35%)
Mozambique	290	69 (24%)
Malawi	177	47 (27%)
Cambodia	97	17 (18%)



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