Research in and by low-income countries, to reduce poverty and build sustainable societies
Local ownership, long-term engagement and a systems approach

Sweden is one of the world’s most research-intensive countries. We believe in research as a foundation for development, wellbeing and sustainable and democratic societies. This is why research cooperation is an important part of Swedish development cooperation. The overall goal is to save lives, reduce poverty and develop sustainable societies. All the research we support contributes, directly or indirectly, to the Sustainable Development Goals of the 2030 Agenda. By building local research capacity we contribute to institutional development in low-income countries, essential to promote long-term development.

All countries, including low-income ones, need research capacity to identify local problems and explore relevant solutions. Sida supports research for, in and by low-income countries. We build research capacity to create sustainable, self-regenerating research environments. We also promote research-driven innovation by supporting local and regional innovation systems. Our research cooperation partners operate at global, regional and national levels.

We support research in a large number of areas, such as agriculture and fisheries, climate and environment, energy, water and sanitation, sexual and reproductive health and rights, infectious diseases that disproportionately affect the poor, economic policies, democracy and human rights. This entails natural sciences, social sciences and the humanities – applied science as well as basic research.

High-income countries still dominate the world’s collected knowledge production. Priorities of low-income countries, and the perspectives of people living in poverty, are not sufficiently considered. The Swedish view is that development cannot be externally created or imposed. Local ownership is emphasized in all our research cooperation and research priorities are set by our partners. We are guided by principles of equity, gender equality, environmental sustainability, academic freedom, transparency and anti-corruption.

In our research cooperation, the perspectives and priorities of low-income countries and regions are always in focus.

AnnaMaria Oltorp
Head of Sida’s Unit for Research Cooperation

This is the group based in Stockholm working with Sida’s research cooperation. We also have seven colleagues in Swedish diplomatic missions in Addis Ababa, Bangkok, Dar es Salaam, Kampala, Kigali, La Paz and Maputo.
Our systems approach implies that we support many features of the research system. Within a university, we support not only research training and research groups, but also other functions to create a productive research culture. Research capacity at universities are linked to research in regional and global organizations. We also support research councils in low-income countries.

We coordinate with other funders and mobilize resources for global research calls, promoting the participation of researchers from low-income countries (e.g. within the Belmont Forum, the European Commission and the Global Forum of Funders).

Research takes time and does not always generate concrete, applicable results in the short term. With 45 years of experience, we know that results may come after many years, even after the external research support has been phased out. Our long-term research cooperation contributes to the successful implementation of other development efforts. The budget of Sida’s research cooperation is close to one billion SEK per year.

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**Our aims**

1. To build research capacity in low-income countries and regions
2. To support high-quality research and research-driven innovation of particular relevance to poverty reduction and sustainable development in low-income countries and regions
3. We work with our partners to achieve the Sustainable Development Goals

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**Our guiding principles**

- **Local Ownership**
- **Long-term Engagement**
- **Systems Approach**
- **Conflicts Perspective**
- **Gender Equality**
- **Human Rights-based Approach**
- **Environmental & Climate Perspective**
At its core, Sida’s research cooperation aims to promote low-income countries’ intellectual autonomy, in order to reduce poverty and develop sustainable societies.

We currently have bilateral research cooperation with Bolivia, Cambodia, Ethiopia, Mozambique, Rwanda, Tanzania and Uganda. One or several public universities work in close cooperation with primarily Swedish universities. The purpose is to strengthen research capacity in partner countries and their ability to train new generations of researchers. The cooperation often includes support to national research policy development and strengthening national research councils.

In the “sandwich model”, PhD candidates spend part of their time at a Swedish university for courses, analysis and writing, and the other part in their home country for field work and building research capacity at their institution. Swedish supervisors collaborate with supervisors from the home university. Support is also provided to institutional functions, such as ICT, labs, library, research management, research communication, quality assurance, gender mainstreaming etc., as needed.

Moreover, capacity is built within and with our regional and global research partners, in a way whereby partners at all levels can mutually benefit. This systems approach enables the creation of sustainable research environments.

In Uganda, bilateral cooperation is soon to be phased out after 20 years. In e.g. health sciences, the country has gone from unprecedented brain drain to Makerere University attracting prestigious competitive grants from several international funders of research. Over 50 PhDs have graduated in medical disciplines in cooperation with Karolinska Institutet in Sweden and over 500 medical publications have been produced, among them results that have influenced UNICEF and WHO to change their recommendations on childhood febrile illness regarding malaria, pneumonia and diarrhoea.

My PhD provided me with the tools I needed to step out and make a difference for my country, improving access to health care for children in low income settings. Sida’s research cooperation has enabled me to pass on research and project management skills to other health innovators.
Biofortified sweet potatoes put an end to hidden hunger

New varieties of orange-fleshed sweet potato, rich in beta-carotene, save children from blindness and stunting.

Vitamin A deficiency is one of the most pernicious forms of under-nourishment in the developing world. It weakens the immune system, makes people more vulnerable to deadly diseases like malaria, measles and diarrhoea, limits growth and is a leading cause of child blindness.

To solve this problem, the International Potato Center, one of the institutes within the global agricultural innovation network CGIAR, has introduced new varieties of orange-fleshed sweet potato, rich in beta-carotene, which the body uses to produce vitamin A.

Coupled with community-level nutrition education, millions of vulnerable families in sub-Saharan Africa and Asia have been reached, and the status of vitamin A has improved significantly among young children who eat the orange-fleshed sweet potatoes daily.

Sida is one of the major donors to the CGIAR, with its 15 research centres across the globe, working in close cooperation with farmer organizations.

Another long-time partner with core support from Sida is the International Centre of Insect Physiology and Ecology, which has developed the innovative push-pull technology, allowing small-scale farmers to get rid of weeds and bugs without using costly pesticides, thereby improving food security for hundreds of thousands of families in sub-Saharan Africa.

Archaeology rewrites African history

A multi-dimensional understanding of poverty calls for research in many fields. The social sciences and humanities make up an important part of Sida’s research cooperation.

After hundreds of years of historical research dominated by Europeans, African history is being rewritten, by Africans themselves.

Sida has supported archaeological research in eight countries in East Africa, exploring the long period between the stone age and colonization, when there were several highly developed cultures in the region.

The material unearthed has, bit by bit, clarified the picture of the East African past, changing the view that the history of African civilization began with the arrival of Europeans.

In addition to new knowledge, the objective of the archaeology programme was to build national institutions and facilitate regional cooperation, with a new generation of East African archaeologists who can carry on research and train future archaeologists.

Social sciences and humanities play a wide and important role for identity, understanding of human behaviour, democracy, human rights, critical thinking and public debate – all crucial for poverty reduction and sustainable development.

In the 1970s and ‘80s, when many countries in Latin America were military dictatorships, Sida supported independent social scientists, who later played an important role in the transition to democracy.

Today Sida supports regional organizations and research programmes in social sciences and humanities in Africa, Latin America, the Middle East and South East Asia.
**Pushing towards gender equality in all contributions**

*Only 29 percent of the world’s scientists are women, and many studies neglect gender perspectives, even when highly relevant. A lot of work remains to achieve gender equality in research.*

Sida supports women researchers in their careers and pushes for gender equality in all our contributions, at universities, regional organizations and thematic programmes. We support PhD and early career fellowships specifically to women via the Organization for Women in Science for the Developing World.

We have helped integrate gender perspectives into research, and we support universities to mainstream gender equality into curricula, policies and practices, to promote enrollment and retention of female students and faculty.

We also support research that is particularly relevant to women, such as within sexual and reproductive health and rights. In Tanzania, research on gender violence has led to changed attitudes and improved legal protection of women. In Mozambique, research comparing health complications after safe and unsafe abortions has contributed to legalization of abortion. Sweden has supported the Human Reproduction Programme at WHO since its creation in 1973.

*When you train a woman, you train a nation.*

Dr Betty Nannyonga, mathematician at Makerere University, Kampala, former Sida PhD and current Post-doc, who has established a network for women in basic sciences in East Africa.

[Photo: Oskar Lüren]

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**Mapping plant biodiversity lays basis for sustainable use**

*Basic research is the foundation for many applications, both foreseeable and completely unknown. One example of Sida’s long-term investment in basic research is the Ethiopian Flora Project.*

The flora project started in 1980 as a part of the bilateral research cooperation between Sweden and Ethiopia. The aim was to produce a modern flora, build up the national herbarium, including a library, and promote scientific activities in various fields of botany, ecology and plant physiology.

29 years later the eight volumes of the flora were completed and eleven Ethiopian PhDs had been trained, becoming the nucleus for the advancement of plant sciences in Ethiopia. The flora and research capacity pave the way for environmental protection, new innovations and sustainable use of Ethiopia’s great botanical diversity.

![Flora Picture](Photo: Rod Waddington, CC BY-SA 2.0)

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**Sound economies with a well-informed cadre of locally-based economists**

*With research on key economic issues, such as taxation, healthcare financing, or resource management, the AERC contributes to sound economic policies in sub-Saharan Africa.*

Sida has provided core funding to the African Economic Research Consortium (AERC) since its foundation in 1988. The network has trained thousands of Masters and PhDs in economics, also from fragile states, and leads important economic policy research.

One example is the necessary regulatory response to the mobile phone-based M-Pesa payment system in Kenya, in place thanks to economists involved with the AERC. M-Pesa has led to financial inclusion of the unbanked.

AERC alumni are found in key positions in public agencies in many African countries. They contribute to improved economic policies on the continent, which in turn lay the foundation for poverty reduction and sustainable development.
Sound economies with a well-informed cadre of locally-based economists

With local innovation systems in place, innovation can flourish

Our support to innovation promotes the environment and conditions for innovation to take place. Sida has pioneered in assisting innovation systems building in low-income countries.

With limited commercial incentives to invest in vaccines for the developing world, producing a safe, effective and affordable vaccine against cholera has only been possible through long-term research cooperation involving several countries and a variety of public and private partners.

Swedish support began in the 1970s with basic research at Gothenburg University in Sweden on the fundamental mechanisms of the disease and immunity. It was followed by field trials and development of an oral vaccine in cooperation with icddr,b in Bangladesh, and technology transfer, licence and continued development led by the International Vaccine Institute in Korea. There is now a yearly production of 25 million doses, that has prevented epidemic outbreaks among vulnerable groups.

Research for health makes up a large part of our portfolio, with partners such as TDR, Alliance for Health Policy & Systems Research and the European & Developing Countries Clinical Trials Partnership.

For sustainability, innovation systems need to be put in place, not just support to specific innovations. The structures and capacity have to be built locally and regionally. We have seen that large impact can be achieved when different stakeholders are involved at an early stage, including universities, businesses, the public sector and the civil society. Building trust is key.

All our innovation support is context-specific and based on strong local ownership, e.g. the platform for collaboration between Aymara people and researchers at University of San Andrés in Bolivia, in cooperation with Lund University in Sweden.

People tell the researchers what their challenges are, and the researchers try to find solutions together with them.

One outcome is the production of a high-value quinoa-based milk, that allows young people to stay and earn a living, instead of having to leave the community.
Research capacity enables countries to seize ownership over their own development and participate in the international knowledge society. Sida supports research of relevance to poverty reduction and sustainable development and assists in building research capacity and systems for research-driven innovation in low-income countries. The aim is to save lives and lay the foundation for every person’s right and opportunity to live a decent life.

Do you share our belief in research’s role for development? Do you share our values of equity and sustainability and want to join forces with us? Please contact Sida’s Unit for Research Cooperation at research@sida.se. You can find more information about our research cooperation at www.sida.se/research.

Are you a researcher or research organization looking for funding? Please have a look at the list of calls and grants on our website. Individual research projects can only get Sida support via the work of our partner organizations.