

Swiss Agency for Development and Cooperation SDC

# RESEARCH CONCEPT 2025-28 DEVELOPMENT AND COOPERATION POLICY SECTOR



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# **Foreword**

Switzerland is recognised worldwide for its excellence in research and innovation, which are pillars of Switzerland's foreign policy profile. Research and innovation contribute to the achievement of the sustainable development goals, increase the competitiveness of companies and create jobs.

To achieve its strategic objectives, the SDC supports scientific research programmes in the field of international cooperation. In these programmes, research and innovation are not an end in themselves, but a means to promote global sustainable development without poverty and to reduce global risks. SDC-funded research generates new knowledge and innovative solutions. Its application and scaling increase the impact of international cooperation.

Cross-border research partnerships with our priority countries are mutually reinforcing. They go beyond the academic world and involve government actors, NGOs, foundations and the private sector. This inter- and transdisciplinary approach to research gives the SDC access to new capacities and specific know-how in fields such as technology, artificial intelligence and digitalisation. Research has a multiplier effect and provides the necessary impetus needed to meet the challenges of international cooperation and contribute to solve complex global problems. Certain innovations based on inter- and trans-disciplinary research between Switzerland and partner countries have a potential impact that goes far beyond traditional international cooperation.



For the period 2025–2028, this Research Concept in the Policy Sector Development and Cooperation provides the framework for SDC's research in international cooperation (IC) in collaboration with the FDFA's Peace and Human Rights Division (PHRD) and the State Secretariat for Economic Affairs (SECO). It focuses on the IC's priority thematic areas, namely food systems, health, the economy and education, climate and the environment, water, and peace, governance and gender. The emphasis is on innovative approaches and the impact of research on development.

Patricia Danzi Director General

Swiss Agency for Development and Cooperation (SDC)

# 1. Introduction

The Swiss Federal Administration commissions and supports scientific research to inform government tasks. These activities constitute a public task commonly referred to in German-speaking countries as 'Ressortforschung', which roughly translates as 'policy research'. The research serves as an academic foundation for policymaking in the various sectors<sup>1</sup>, for measures to implement legal requirements, for legislative work and for the formulation of responses and measures to implement parliamentary procedural requests. Federal government research can include any type of academic research, including basic research, applied research and development (e.g. the setting up of pilot plants and demonstration facilities). It also includes accompanying measures to support Swiss research and knowledge and technology transfer. A comprehensive statutory framework governs all Federal Administration research activities. The Federal Constitution (SR 101) and the Research and Innovation Promotion Act<sup>2</sup> (RIPA; SR 420.1) provide the overall legal basis.

Besides the Federal Act on the Promotion of Research and Innovation, Federal Administration research is governed by other acts and ordinances containing more explicit provisions regarding the implementation of *intramural research* and the *granting of contributions* (grants/subsidies) to research facilities, programmes or projects by the federal government. In addition, international agreements, conventions and memberships also contain or entail obligations with regard to Federal Administration research. Government-funded research thus also plays an important role in international cooperation.

All Federal Administration research-related activities are also subject to quality assurance guidelines based on the principles of lawfulness, expediency, effectiveness and efficiency.

Total expenditure on R&D carried out in Switzerland<sup>3</sup> amounted to around CHF 24.6 billion in 2021 (according to FSO figures). The Federal Administration's share of research funding is relatively low, amounting to 1.2% (around CHF 282 million in 2021), while the majority of funds come from the private sector (66%), followed by the Federal Administration (16%), cantonal authorities

(11%), and international sources (5%).<sup>4</sup> In accordance with RIPA, the Confederation primarily funds research and development in the higher education sector, funding organisations such as the Swiss National Science Foundation, the Swiss Academies of Arts and Sciences and Innosuisse, research institutions of national importance and international research cooperation.

### The international cooperation policy sector

Swiss international cooperation aims to alleviate need and poverty and promote respect for human rights, democracy, the rule of law, the peaceful co-existence of peoples and the conservation of natural resources. Addressing global challenges plays an important role here. Based on its mandate and with a view to achieving the strategic objectives of Swiss international cooperation, the Swiss Agency for Development and Cooperation (SDC) promotes scientific research in the field of development and cooperation. By generating and applying solution-oriented knowledge, the SDC helps to reduce poverty and global risks, promotes sustainable global development and supports developing countries in their efforts to achieve the 2030 Agenda.

The scientific research in international cooperation is financed through official development assistance (ODA) in accordance with the current dispatch.

This development and cooperation policy sector research concept outlines the most important challenges and objectives for Swiss international cooperation as well as the research priorities in regard to development and cooperation.

<sup>1 (</sup>listed in the Federal Council's dispatch on education, research and innovation), see https://www.ressortforschung.admin.ch/rsf/de/home/themen/forschung-nach-politischen-bereichen.html

<sup>2</sup> Art. 16 of RIPA provides for the following policy research measures: (1) the awarding of research contracts (2) running the Confederation's own research institutes (intramural research), (3) implementing the Federal Administration's own research programmes in cooperation with higher education research centres, research funding institutions, Innosuisse or other organisations that fund research (4) providing contributions to higher education research centres for the implementation of research programmes.

<sup>3</sup> Swiss and international funding

<sup>4</sup> Statistical figures, especially those produced by the private sector, are always subject to a degree of uncertainty.

# 2. Overview of policy sector

### 2.1. Legal basis and mandate

Switzerland's international cooperation pursues the objectives set out in Article 54 paragraph 2 of the Federal Constitution and also serves Switzerland's foreign economic policy (Art. 101 Cst.). Through this cooperation, the Swiss Confederation plays its part in "alleviating need and poverty in the world, while promoting respect for human rights and democracy, and contributing to the peaceful coexistence of peoples and the conservation of natural resources."

The Federal Act of 19 March 1976 on International Development Cooperation and Humanitarian Aid and the Ordinance of 12 December 1977 provide for the implementation of these foreign policy tasks.5 Support for scientific research on development cooperation is explicitly provided for in Article 29 of the Ordinance.

### 2.2. International cooperation strategy

Switzerland's international cooperation objectives pursue the aims of the Confederation as set out in Article 54 paragraph 2 of the Federal Constitution and defined by law.<sup>6</sup> To implement this statutory mandate, the Federal Council sets out objectives for international cooperation in its IC strategy. For the 2024–28 period, it has set four objectives:

Human development: Save lives, alleviate human suffering and support access to high-quality basic services for the most disadvantaged population groups.

Sustainable economic development: Create decent jobs by fostering the development of markets, the local economic environment and the private sector.

Climate and environment: Ensure environmentally friendly development that is resilient to climate change and natural disasters for the benefit of the most disadvantaged.

Peace and governance: Resolve conflicts, promote peace, democracy and the rule of law, and uphold human rights.

These objectives are mutually reinforcing and interdependent. Economic development thus supports human development and the environment, while the stability that comes with peace and the rule of law is a prerequisite for sustainable development. Within the framework of these objectives, Switzerland supports developing countries in their efforts to achieve the goals of the 2030 Agenda.

<sup>5</sup> Federal Act of 19 March 1976 on International Development Cooperation and Humanitarian Aid (SR 974.0); Ordinance of 12 December 1977 on International Development Cooperation and Humanitarian Aid (SR 974.01)

<sup>6</sup> The objectives for international cooperation are set out in Articles 5 and 7 of the Federal Act of 19 March 1976 on International Development Cooperation and Humanitarian Aid of 19 March 1976 (hereafter Development Cooperation and Humanitarian Aid Act), and Article 2 of the Federal Act of 19 December 2003 on Measures pertaining to Civil Peace Support and the Promotion of Human Rights (hereafter Peace Support and Human Rights Act).

Switzerland is also committed to promoting gender equality, good governance and a human rights-based approach.

The three criteria set out for the strategic direction of the IC Strategy 2025–28 include needs on the ground, Swiss IC's added value by international standards and Switzerland's long-term interests – including the climate and migration – are essential for Switzerland's prosperity.

# Scalable solutions for a sustainable Development Competence building IC STRATEGY Academic excellence & Innovation capacity Matchmaking

Figure 1: Analysis criteria for the strategic orientation of the IC Strategy (figure adapted from IC Strategy 2025–28)

SWITZERLAND'S LONG TERM ADDED VALUE

# 2.3. Research anchored in the Foreign Policy Strategy

The Foreign Policy Strategy (FPS) 2024–27 sets out how Switzerland intends to preserve its security, prosperity and independence to safeguard its high standard of living. To achieve this, the strategy focuses on the four thematic areas of peace and security, prosperity and competitiveness, environment, and democracy and governance. Research and innovation are key to Switzerland's foreign policy profile and central to its efforts to achieve the Sustainable Development Goals (SDGs), ensure a competitive environment for business and create jobs. Switzerland seeks to include academia and private sector actors in the shaping of foreign policy and international governance.

Research and innovation also feature prominently in AVIS 28, the Federal Council's Foreign Policy Vision. This close link between government, academia and business strengthens Switzerland's position as a global centre of expertise, which benefits its foreign policy.

### 2.4. Challenges and objectives of research in international cooperation

### **Challenges**

The world today is undergoing profound change and multiple crises, with far-reaching implications for development opportunities and prospects in poorer countries. According to the 2023 special edition of the Sustainable Development Goals Report<sup>7</sup>, which discusses the current state of progress halfway to the deadline for the 2030 Agenda, the number of people living in extreme poverty is higher today than it was four years ago. Hunger is also on the rise and is back at 2005 levels. Growing inequalities and the triple planetary crisis of climate change, pollution and biodiversity loss are threatening to undo the progress already made. In 2023, only 12% of the SDGs had been met. About half of the goals are off track, and for 30% of the goals the situation is actually worse than in 2015.

Scientific research helps us to better understand and anticipate these challenges, and to develop strategies at different levels to address them. This requires not only conventional approaches to research but also the use of transdisciplinary methods and international research partnerships. Moreover, addressing development challenges and global issues will require advances in technology and socio-economic and political innovation.

### Main objectives of research in international cooperation

For the SDC, research and innovation are not ends in themselves but rather a means to promote global sustainable development. The SDC's ODA-funded research aims to:

- generate new findings and innovative solutions to reduce poverty, provide humanitarian aid and support sustainable development;
- > promote the application and scaling up of findings and solutions in SDC programmes and in its partner organisations and countries;
- > build the capacity of researchers and their institutions in partner countries (localisation);
- > help measure the impact of international development cooperation; and
- > assist SDC and SECO partner countries in their efforts to achieve the 2030 Agenda.

The research findings inform development policy decisions made by Switzerland's partner countries and organisations, and improve the effectiveness, efficiency and long-lasting impact of SDC programmes. Notably, this research directly shapes Switzerland's engagement under its International Cooperation Strategy 2025–28, which is guided by the criteria of (1) needs on the ground, (2) Switzerland's long-term interests, and (3) the added value of Swiss international cooperation by international standards.

### BOX 1: Research on the implementation of the 2030 Agenda

At the United Nations summit in September 2015, heads of state and government adopted the 2030 Agenda for Sustainable Development along with 17 Sustainable Development Goals (SDGs).

The 2030 Agenda serves as the overarching framework for SDC-supported research. This research plays a vital role in advancing the SDGs, with a specific focus on reducing poverty and hardship, in line with the overarching principle of the SDGs to 'leave no-one behind'.

The mid-term report on progress towards the 2030 Agenda pointed out that the potential for science, technology and innovation to be applied to the SDGs was largely untapped. It lists supporting research as **a priority action** for the remaining years and emphasises that cross-disciplinary collaboration will be needed to solve complex interlinked challenges. The report goes on to say that **a strong** science-policy-society interface can build trust in science and evidence.



























Figure 2 The 17 SDGs. Source https://unosd.un.org

<sup>2023</sup> Report on the Sustainable Development Goals, special edition. https://unstats. un.org/sdgs/files/report/2023/secretary-general-sdg-report-2023--EN.pdf

# Promotion of research in international cooperation:

The SDC invests approximately CHF 50 million annually in demand-driven research programmes and projects addressing its thematic priorities across Africa, Asia, and Latin America. The SDC supports North-South collaboration in research programmes and international research networks and projects.

The current IC Strategy (2025–28) guides the SDC's research promotion and planning activities, which emphasise interand transdisciplinary research approaches with the active participation of various stakeholders (e.g. ministries, NGOs, foundations and private sector partners). Such approaches generate fresh perspectives and innovative solutions to reduce poverty, strengthen the humanitarian nexus and speed up progress on the SDGs. For example, inclusive policies and sustainable business models promote the adoption and scaling up of new approaches and technologies. The IC Strategy also supports the use of impact assessments and other scientific methods to evaluate the effectiveness of international cooperation activities.

Swiss ODA-funded research activities are designed to strengthen research capabilities and networks in development-related fields and have a positive impact on the institutional research environment in Switzerland and its partner countries. Swiss international cooperation has gained access to international networks, research expertise, innovation and practical knowledge in development-related areas thanks to cooperation stretching back many years with research institutions in Switzerland, Africa, Asia, Latin America, Eastern Europe and Central Asia along with investments in global research partnerships and programmes.

Research activities conducted as part of Swiss international cooperation also promote Switzerland as a research hub. North-South research collaborations play a vital role in driving innovation, fostering sustainable economic growth and creating prospects, especially for young generations in partner countries. These partnerships also help cultivate beneficial diplomatic ties between Switzerland and its partner countries.

The SDC has a range of means at its disposal to promote research in international cooperation. These include the award, through competitive tendering procedures, of contracts (mandates) to research institutions, targeted contributions to local, regional, and international research programmes and projects, and the financing of North–South research partnerships.

**BOX 2: Definition of scientific research and innovation Scientific research** (research) is the method-based search for new knowledge; it covers in particular:

**basic research**: research, the main goal of which is to gain knowledge

**applied research**: research, the main goal of which is to contribute solutions to practical problems.

Science-based innovation (innovation) means the development of new products, methods, processes and services in industry and society through research, particularly applied research and the exploitation of its results. In addition to technological innovations like new machines, this can include new products, services, methods, interactions, or processes. Social innovations involve planned and controlled changes within a social system. For innovation to be used successfully, social acceptance and pathways to change play an important role.

Scientific research and innovation are closely linked, and scientific research often serves as the basis for innovation.

Transdisciplinary research (TDR) is a reflexive research approach that addresses societal problems by means of interdisciplinary collaboration as well as the collaboration between researchers and extra-scientific actors; its aim is to enable mutual learning processes between science and society. In other words, TDR seeks both to reshape the boundaries between disciplinary silos and bridge the gap between academia and practice. The aim of TDR is not only to develop knowledge to understand the issues, but also to find ways to effectively address, solve or prevent problems. In

Advisory services, teaching and the implementation of development projects by higher education institutions are not regarded as scientific research.<sup>12</sup>

<sup>8</sup> Art. 2, Federal Act on the Promotion of Research and Innovation. https://www.fedlex. admin.ch/eli/cc/2013/786/en

<sup>9</sup> SERI (2016), Research and Innovation in Switzerland 2016, SERI, Bern; Bornstein et al. (2014), Zur Bedeutung von Sozialer Innovation in Wissenschaft und Praxis (study on behalf of the SNSF), W.I.R.E, Zürich; Zürcher et al. (2019), Empfehlungen für eine wirksame Förderung der Geistes- und Sozialwissenschaften zuhanden der Träger und Organe des BFI-Bereichs, SAGW, Bern.

<sup>10</sup> Swiss Academies of Arts and Sciences. Based on Jahn, T., Bergmann, M. & Keil, F. (2012). Transdisciplinarity: Between mainstreaming and marginalization. Ecological Economics, 79, 1-10. https://transdisciplinarity.ch/en/transdisciplinarity/was-ist-td/

<sup>11</sup> Swiss Academies of Arts and Sciences https://transdisciplinarity.ch/en/transdisciplinarity/was-ist-td/goals-and-principles/

<sup>12</sup> OECD (2015), Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, The Measurement of Scientific, Technological and Innovation Activities, OECD Publishing, Paris.

### Basic principles for investment in research

ODA-funded research activities should adhere to the following principles:

- Research must be guided by the SDC's long-term strategic objectives.
- > It must be solution-oriented with practical applicability.
- It must prioritise the communication, dissemination and application of research findings.
- Research cooperation should be partnership-based. The 11 principles established by the Swiss Commission for Research Partnerships with Developing Countries (KFPE) serve as a frame of reference.<sup>13</sup>
- The funding should strengthen applied and transformational research capacities in Switzerland and its partner countries.
- Research should be exemplary in terms of both scientific quality and relevance to development.
- Research freedom in terms of formulating research questions and selecting methods must be respected.
- Research grants must be awarded and strategic research partners selected on a competitive basis.
- The results of ODA-funded research should be open access where possible.
- Where appropriate and useful, the SDC must collaborate with other donors and coordinate its support for research at the national and international levels.

### 2.5. Responsibilities and delimitation

The aforementioned strategic objectives determine the type of research supported under the banner of Swiss international cooperation. In addition to the Swiss Agency for Development and Cooperation (SDC), the Peace and Human Rights Division (PHRD) within the State Secretariat of the Federal Department of Foreign Affairs (FDFA) and the Economic Cooperation and Development Division of the State Secretariat for Economic Affairs (SECO) are also engaged in Swiss international cooperation activities. Research funding awarded by the SDC, PHRD or SECO that serves the development and cooperation policy sector counts as ODA.

### Swiss Agency for Development and Cooperation (SDC)

The SDC implements the Federal Council's foreign policy on humanitarian aid and development cooperation. It works at both multilateral and bilateral level. The SDC has seven divisions: Humanitarian Aid (HA) and the Swiss Humanitarian Aid Unit (SHA); Foundations and Quality; Multilateral Affairs and NGOs; Thematic Cooperation; and three geographical divisions: MENA–Europe; Sub-Saharan African and Asia–LAC.

As a general rule, scientific research in the seven divisions falls under the development and cooperation policy sector. A detailed description of these research activities will be provided in the following sections. An exception to this is research conducted as part of the Swiss contribution to selected EU member states. Even though research partnerships are a core area of this cooperation, they do not count as ODA and are therefore not covered by this research concept.<sup>14</sup>

<sup>13</sup> http://www.naturalsciences.ch/organisations/kfpe/11\_principles\_7\_questions

<sup>14</sup> For further details about Switzerland's contribution to selected EU countries, visit: https://www.eda.admin.ch/erweiterungsbeitrag/en/home.html.

### **State Secretariat**

Through its Peace and Human Rights Division (PHRD), the FDFA State Secretariat is also active in areas of Swiss international cooperation. The PHRD advocates for peace, respect for human rights and the protection of the individual. It promotes the peaceful resolution of conflicts, protection of the civilian population during and after conflicts, crises and natural disasters and supports states' efforts to ensure the observance of human rights.

Security and peace policy research is described in the concept paper for this research sector, which is drafted by the Federal Department of Defence, Civil Protection and Sport (DDPS). Information on this topic can be found on the federal policy research website (de, fr).<sup>15</sup>

### State Secretariat for Economic Affairs (SECO)

Another organisation working on Swiss international cooperation is the Economic Cooperation and Development Division of the State Secretariat for Economic Affairs (SECO). As part of the Federal Department of Economic Affairs, Education and Research (EAER), SECO promotes sustainable economic growth in selected partner countries in the Global South (Africa, South America, South-East Asia) and East (Eastern Europe and Central Asia). Together with the SDC, SECO is implementing Switzerland's second contribution to selected EU member states (not Swiss ODA). SECO's international cooperation projects promote a stable business environment and support innovative private-sector initiatives that improve market access for businesses, generate income and facilitate the integration of partner countries in the global economy. SECO can commission its own research projects within the scope of its remit.

## Research within the Education, Research and Innovation (ERI) sector

The **State Secretariat for Education, Research and Innovation** (SERI) is the federal government's specialised body for education, research and innovation. Switzerland's international ERI strategy was adopted by the Federal Council on 30 June 2010 and updated in 2018. It is based on the plan to continue developing Switzerland's internationally competitive educational, research and innovation system and to strengthen it over the long term by defining priorities and clear objectives. Switzerland's international ERI strategy covers the activities that are financed according to the policies and measures outlined in the ERI dispatches.

Research (funded by ERI or Swiss international cooperation framework credits) can contribute to solving global problems, support the implementation of the 2030 Agenda for Sustainable Development and play a part in cross-border interaction and international understanding.

In contrast to international scientific research cooperation and the promotion of bilateral research partnerships under the ERI dispatch, ODA-funded research always focuses additionally on reducing poverty in line with the SDC's mandate.

<sup>15</sup> https://www.sbfi.admin.ch/sbfi/en/home/research-and-innovation/research-and-innovation-in-switzerland/promotion-instruments/research-in-swiss-government-departments.html

### 2.6. Review of the 2021-24 period

In 2020, the SDC launched the TRANSFORM funding programme, which aims to bridge the gap between research and practice and replicate research results on a larger scale. TRANSFORM is aligned with Switzerland's International Cooperation Strategy 2020–24 and the SDC's thematic priorities.

As part of the SDC's TRANSFORM *call for proposals*, four transdisciplinary research programmes covering sustainable food systems, water, sanitation and hygiene (WASH), health, and education were selected for implementation by international consortia in several countries.

Additionally, the long-term collaboration between the SDC and the Swiss National Science Foundation (SNSF) established a programme called **Solution-oriented Research for Development** (SOR4D) (see Box 3). This new research programme is designed to support applied, inter- and transdisciplinary research initiatives under the 2020–2030 Memorandum of Understanding (MoU) signed by the SNSF and the SDC.

Furthermore, the SDC launched research partnerships with the Swiss federal institutes of technology – ETH in Zurich (ETH4D) and EPFL in Lausanne (Tech4Dev). A 2023 external evaluation found that these practice-oriented North–South research programmes complemented other SDC-supported research initiatives and demonstrated a high potential for sustainable impact and scaling.

The SDC and SNSF also co-financed the **Swiss Programme for Research on Global Issues for Development** (r4d programme), which successfully completed 57 projects in over 50 countries by the end of 2023. Communication activities and the translation of research outcomes into policy and practice were integral aspects of the research supported by R4D. The ten-year programme's final evaluation concluded that it contributed significantly to the interdisciplinary and transformative research skills of a broad cohort of young researchers in Switzerland and its partner countries. A number of projects were also able to actively influence policy in the implementing countries, creating a lasting impact.

### Box 3 Solution-oriented Research for Development Programme (SOR4D)

The SOR4D programme builds on experiences and lessons learnt in previous joint programmes. The overarching goal of the SOR4D programme is to produce better knowledge, solutions and innovation through demand-driven, transdisciplinary research that opens up new ways for advancing sustainable development and reducing poverty in ODA-recipient partner countries. The SOR4D funding initiative requires that implementing partners and development actors, such as NGOs, foundations, ministries or private sector partners, commit as equal partners to the North-South research collaborations from the beginning. This ensures that the policy impact of the projects and the scaling up of the outcomes are integrated into the project design from the outset. The research questions are co-designed by the South-Swiss partners to ensure that the research objectives are demand-driven and the results actionable. A minimum of 50% of the funding is allocated to developing countries. By the end of 2023, two calls for proposals had been issued as part of SOR4D, resulting in the approval of 15 transdisciplinary research projects.



Figure 3: Group discussion on the potential for an agroecological transition in Senegal. The photo was taken as part of the SOR4D project 'Agroecology for Resilient Territories in Senegal'. Photo: Raphael Belmin/Cirad

## Collaboration with the private sector: development of low-carbon cement

Cement production is responsible for roughly 5-8% of the global greenhouse gas emissions caused by human activity. *Limestone Calcined Clay Cement* (LC3) is a low-carbon blended cement with the potential to reduce the carbon footprint of concrete by up to 40%. This project, led by a consortium of partners from EPFL, the Indian Institutes of Technology and universities in Cuba and Brazil, builds on research originally co-funded by the SDC and the SNSF. SDC funding since 2013 has enabled the project to successfully move from the laboratory to large-scale commercial production. LC3 is now being produced or developed in over 50 countries and has been adopted by major multinational cement manufacturers (including HOLCIM and Heidelberg Materials), who have announced major investments in LC3 technology.

## Sustainable solutions in humanitarian aid: resilient shelters in South Sudan

As part of the SDC-supported Tech4Dev programme, researchers from EPFL and the University of Juba are creating resilient emergency housing solutions with the NGO MEDAIR. The Computational Design for Resilient Shelters project was launched to address the severe and persistent seasonal flooding in South Sudan. The project has yielded new robust flood shelter solutions that are low cost, versatile and make efficient use of available materials. The iterative design and testing process, which included stakeholders with first-hand knowledge of local technology and society, facilitated the adoption of these methods in local construction practices. This in turn created new opportunities for climate resilience and sustainability.

The Geneva Technical Hub was established in 2021 by the United Nations High Commissioner for Refugees (UNHCR) and the SDC to improve the lives of refugees, internally displaced persons and their host communities. Universities including the Swiss institutions eawag, ETHZ and EPFL, are supporting the UNHCR and its local implementing partners in the development of innovative solutions. For example, EPFL has developed a guide for settlement planners on how to include adequate communal open spaces in refugee settlements to maintain an ecological balance, reduce their climate impact and further resilience to climate-related risks.

### **Research cooperation with Eastern Europe**

Launched to address the significant gaps in climate observation in mountain regions of Central Asia, the Cryospheric Observation and Modelling for Improved Adaptation in Central Asia project (CROMO-ADAPT 2021–25) supports policy design, planning, and the implementation of adaptation measures in the areas of water and risk management in Kyrgyzstan and Tajikistan. The project seeks to safeguard water supplies and minimise the risk of natural disasters following the retreat of glaciers and thawing of permafrost. To achieve this, the project leverages the expertise of leading Swiss research institutions (the University of Fribourg and the Institute for Snow and Avalanche Research) to train local experts and establish locally managed, sustainable networks for monitoring the cryosphere.

### Impacts and possible uses of digitalisation

New technologies are helping to address complex humanitarian and development challenges more efficiently and effectively. They also play a crucial role in efforts to meet the SDGs by providing tools for sustainable resource management, public administration, finance and health systems. Reliable data and data governance are fundamental in this context, serving as the foundation for digitalisation.

### The Agripath project

One example of a project that makes use of digitalisation in partner countries is Agripath. Agripath is a consortium of five research and practitioner partners under the leadership of the Centre for Development and Environment (CDE) at the University of Bern. In Uganda there is only one agricultural adviser for a thousand smallholder farmers. To address this disparity, the Agripath project aims to enhance the productivity, climate resilience and income of 50,000 smallholder farmers by supporting the adoption of sustainable agricultural practices. To accomplish this, Agripath has developed and launched a digital advisory service, the Farmbetter app. The Farmbetter app is currently being piloted in five countries: Burkina Faso, Uganda, Tanzania, India, and Nepal.

# 3. Thematic research priorities



Figure 4: Two smallholder farmers discuss the potential of digital advisory services for their farms in Butaleja district, Uganda, as part of the AgriPath project. Photo: SDC/Mirjam Macchi

In order to achieve Switzerland's strategic international cooperation objectives, the SDC is active in the following thematic areas:

- food systems
- health
- economy and education
- > climate, DRR and environment
- wate
- > peace, governance and gender equality
- migration and forced displacement

The SDC funds research on the basis of demand and can fund projects in any of the above areas. The thematic focus of this research is described briefly in the next sections.

### 3.1. Food systems

### Challenges and need for action

Despite major efforts to combat hunger and malnutrition, the number of people who do not have enough food has risen continuously since 2015. Climate change, conflict, soaring food prices, and the impact of the Covid pandemic have exacerbated this trend.

At the UN Food Systems Summit in 2021, a systemic approach encompassing food production, storage, processing, marketing and consumption was enshrined in a call to action for national pathways to accelerate food systems transformation. A stocktaking exercise in 2023 highlighted investment in research and innovation as one of the priorities for implementing these national development pathways.

In an increasingly interconnected world, Switzerland is also dependent on well-functioning global food systems. Switzerland imports around 50% of its food from abroad, almost 20% from countries outside Europe. Foods such as bananas, coffee, cocoa, sweet potatoes, quinoa, and rice from the Global South are now part of the Swiss diet, and Swiss meat production relies heavily on animal feed from abroad.

### **Focus of research**

Continuous strategic support for research on agriculture and food systems is essential to address these challenges and promote sustainable development at regional, national, and international levels. From 2025 to 2028, the SDC will allocate the majority of its resources to research closely linked to agroecology and nutrition.

Roughly 75% of SDC core funding for agricultural research goes to CGIAR, a global partnership of 15 leading research centres with over 10,000 researchers engaged in joint efforts "to contribute through science to the transformation of food, land, and water systems in the face of the climate crisis". CGIAR research aligns with the 2030 Agenda for Sustainable Development, contributing to five impact areas: 1) nutrition and food security, 2) poverty reduction, 3) gender equality, 4) climate adaptation and mitigation and 5) environmental health and biodiversity. The 33 interconnected thematic or regional research initiatives are grouped into three action areas: genetic innovation, systems transformation, and resilient agrifood systems. The SDC provides un-earmarked core contributions to support CGIAR's entire research portfolio. Specific initiatives in the fields of agroecology and nutrition benefit from additional earmarked contributions.



Figure 5: A food producer at a Plantwise session talking to a plant doctor in Acotama, Huaral, Peru. Photo: CABI

### 3.2. Health

### Challenges and need for action

Environmental, economic and social factors have a major impact on physical and mental health and lead to large disparities in health and life expectancy between the poor and the rich. Basic medical care is a human right. It plays a central role in achieving greater social justice, minimising inequality and fostering sustainable development. However, today hundreds of millions of people worldwide have limited or no access to basic healthcare services. Internationally coordinated responses are needed to address central challenges such as healthcare funding, the quality of health services, and R&D into medicinal products to combat pandemics and diseases of poverty.



Figure 6: A young woman on a hospital bed at Saint Francis Hospital, Ifakara, Tanzania: Photo: SDC/Olivier Praz

### **Focus of research**

Health-related research includes research to improve the efficiency, effectiveness, governance and financing of health-care, as well as to address health determinants. A focus for SDC-funded health research is equal and non-discriminatory access to healthcare in the regions of Africa, Eastern Europe and Central Asia, and at the global level. Access to healthcare is a universal right, but limited resources often hinder its provision.

It is therefore imperative to prioritise research that advances the cost-effective delivery of high-quality healthcare, especially for underprivileged communities. This means investing in product R&D to combat neglected diseases (e.g. malaria drugs) and in research to support the universal provision of quality healthcare services, e.g. into health financing mechanisms such as health insurance systems.

Swiss-supported healthcare research, in line with the SDGs, extends beyond medical care to examine health determinants like access to clean water, food security, gender equality, occupational safety, land rights, and safe housing. This comprehensive, science-based, multisectoral, and transdisciplinary approach addresses socio-economic inequalities and health risks related to water, nutrition and the environment, leading to improved health and significantly lower healthcare costs. Furthermore, the insights gained from this research contribute to the development of sustainable financing and coordination mechanisms that ensure non-discriminatory access to quality healthcare services.

### 3.3. Economy and education

Education is a fundamental human right, serving as a catalyst for sustainable development, economic growth, and the creation of just and peaceful societies. However, in 2022, approximately 250 million children and adolescents were not in education. The number of out-of-school children has risen while public spending on education has fallen, leading to a surge in learning poverty across low- and middle-income countries. A fragmented development architecture has compounded the problem, widening the gap in national and international funding for education. To achieve Sustainable Development Goal 4 (SDG4), increased funding and political will is essential.

The SDC supports social impact enterprises that improve livelihoods through international cooperation. External financing amplifies the effectiveness of this aid. To ensure the profitability of these investments, a solution lies in impact finance. This approach allows third parties to 'purchase' impact, generating additional income for enterprises and investors, thereby addressing the issue of funding.

### **Focus of research**

Research in the economic sector is focused on improving impact management methods to more accurately assess and quantify positive externalities. In the field of development cooperation research, a key priority is the financing of climate-related initiatives. Finally, economic policy research should be geared towards identifying innovative tax strategies that could generate billions in funding annually for climate-related projects.

Key research priorities in education include optimising education systems and interventions to make the most of inadequate funding, exploring innovative financial mechanisms to complement the funding that is available, bolstering the resilience of education systems in fragile contexts and harnessing digital technologies to enhance learning opportunities for marginalised communities.



Figure 7: The son explains the digital world to his father while waiting for the ferry to cross the Mekong, Cambodia. Photo: SDC/Lars Büchler

### 3.4. Climate, DRR and environment

### Challenges and need for action

Climate change is one of the most far-reaching and perilous challenges of our time. Changes in temperature, precipitation and sea level are putting massive pressure on ecosystems and human welfare around the world. The droughts, floods and biodiversity loss that are the direct results of climate change disproportionately affect poorer nations. Securing a habitable, sustainable future for all requires an urgent, extensive and permanent reduction in greenhouse gas emissions along with more support for adaptation and a focus on equitable solutions and better use of new technologies. This will only be possible with political determination, increased funding, and strong science as a basis for prompt action.

### **Focus of research**

Research is improving our understanding of the impacts of climate change and the measures we can take to address the direct threats it poses. It offers crucial information that allows us to prepare for probable scenarios and long-term impacts. It also highlights the societal benefits of reducing greenhouse gas emissions and paves the way for more sustainable, equitable, and transformative systems.

Collaboration with the scientific research community is essential for effective international cooperation on climate change, disaster risk reduction (DRR) and the environment. This collaboration supports international efforts to conserve and sustainably exploit natural resources and ecosystems, reduce risks to protect populations and limit economic losses and develop new low-emission technologies. The main focus of SDC-supported research is on areas where climate change poses significant medium- to long-term risks, such as availability and access to water, food systems, health and energy, including access to affordable renewable energy and energy efficiency.

The research should support the science-policy dialogue surrounding climate change, DRR and the environment in SDC priority regions as well as in Switzerland and globally.



Figure 8: Installation of an early warning system base for glacial lake outburst floods (GLOFs) in Sikkin, India. Photo: SDC/GEOTEST

### 3.5. Water

### Challenges and need for action

Compounded by climate change, growing pressure on increasingly scarce water resources is leading to more water shortages, social tensions and violent conflict over water distribution. This has made it more difficult to ensure access to water, particularly for disadvantaged communities. Integrated management of water resources seeks to balance competing demands and ensure equitable access to water resources.

# 0 125 1000m

Figure 9: SDC-funded research to develop a satellite imaging method to determine groundwater potential in refugee camps in Africa. Photo: SDC

### **Priority research areas**

Growing water stress in many areas of the world is exacerbated by the increasingly evident harmful effects of climate change and contamination of surface and ground water reserves. This situation requires new models of cooperation when it comes to managing transboundary water sources. The Swiss-backed Blue Peace approach to water management seeks to develop new skills and generate context-specific scientific knowledge about water diplomacy and human behaviour to bring about the necessary changes.

Complementary research should be conducted in the areas of: 1) implementation of financing instruments for ecosystem services 2) better understanding of societal behavioural and consumption changes 3) development of innovative methods for hydrological data of all kinds.

In addition to technical issues, research on drinking water supply and sanitation should now focus on context-related, cultural and other factors which can cause technical solutions to fail or frustrate uptake, especially of innovative sewage, water treatment and organic waste recycling solutions. The research should aim to advance social entrepreneurship and support the social fabric through a better understanding of the preconditions and obstacles to behavioural change in the water sector.

Reliable representative data is needed in order to track progress on achieving Sustainable Development Goal 6 on water access and sanitation. SDC-supported research therefore aims to develop and support cost-effective methods for data collection and efficient monitoring systems. These include participatory monitoring through citizen science approaches. Another priority research question is how to reduce the water footprint of businesses and production processes (SDG 12).

These research priorities aim to provide a solid scientific foundation and concrete solutions to support systemic and societal changes in the water sector.

### 3.6. Peace, governance and equality

### Challenges and need for action

The current global crises and ongoing conflicts are placing further strain on fragile economies and societies, leading to an increase in authoritarianism, often accompanied by democratic backsliding that undermines public trust and the legitimacy of democratic institutions, and puts pressure on human rights, gender equality, civic space, and freedom of the media. These impacts are most acutely felt in fragile contexts; it is estimated that 80% of people living in extreme poverty will be living in fragile countries and regions by 2030.

To address these challenges in the long term, research on peace, governance and equality must address how to include all sections of society in solutions to meet these challenges in a sustainable way.

# KALA

Figure 10: Women's forum, Studio Kalangou programme in Niamey, Niger.
Photo: Fondation Hirondelle/Ollivier Girard

### Focus of research

A key question for applied research in the area of peace promotion is how to support societies and political systems for the prevention of violence and armed conflict. Such research should consider cultural factors and the roles women play in peace promotion. The relationship between environmental issues/climate change, peace and conflict is also of growing importance. Research could focus on issues such as how to integrate environmental measures into peace missions, the debates surrounding climate change, security and women's rights, and conflict sensitivity in relation to resource extraction. In fragmented landscapes in which there is a resurgence of armed groups and conflicting geopolitical forces, local peacebuilding solutions are a crucial research topic.

Applied research on democracy should address issues such as the democratic legitimacy of state intervention and what states can do to accommodate diversity and protect individual rights. With the rise in authoritarianism globally, there is a need to understand how international cooperation can contribute to resilient democratic systems. The main challenge in the fight against corruption is that measures to deal with individual cases rarely have the desired impact. Instead, social norms that promote and sustain the fight against corruption need to be identified and supported. In the area of digital governance, the adoption of e-government solutions in public administrations and the integration of artificial intelligence have raised questions about the potential advantages and implications for individuals.

With regard to equality, there is a need for applied research into ways to reach marginalised groups, ensure equal opportunities and dismantle unequal power structures. Applied research into gender equality issues should ask how best to support and ensure the safety of victims of discrimination and violence, and what measures and prevention are needed to address different forms of gender-based violence. In politics and business, the problem is that although in many places more women occupy decision-making positions at various levels, systemic structures and inequality continue to prevent the realisation of equal rights for women, especially in conflict and crisis situations.

### 3.7. Migration and forced displacement

### Challenges and need for action

In today's globalised world, migration shapes the social, economic and cultural realities of millions. There are currently more than 280 million international migrants in the world, almost half of whom are women. Migrants make significant socio-economic and cultural contributions to their host countries, bringing new ideas, expertise, skills and entrepreneurship. Additionally, they have a positive impact on their communities and countries of origin, in particular through the remittances they send to their families.

However, migration also presents challenges that hinder progress towards the 2030 Agenda. Irregular migration and forced displacement come at a human cost, leaving people vulnerable to exploitation, abuse, and discrimination. In recent years, factors such as persecution, conflict, violence, and natural disasters have led to a sharp increase in the number of displaced people, putting immense pressure on governments and host communities, especially in low- and middle-income countries, where the majority of displaced people seek refuge.

Switzerland is committed to fostering the positive effects of migration and minimising its negative impacts.

### Focus of research

The focuses for SDC-backed research are:

- labour migration, particularly decent work and social security
- how to include migrants in society and find lasting solutions to create good prospects for displaced people
- > how climate change affects migration and displacement
- > the role of cities with regard to migration
- the ways in which migrants and diaspora communities contribute to the development of countries of origin through remittances, financial services, investment and trade

The sharing of research findings supports knowledge-based dialogue, allowing decision-makers to leverage the potential of migration and gain new insights into areas such as climate change and migration. Cross-departmental access through the Interdepartmental Structure for International Cooperation on Migration ensures that findings contribute to dialogue throughout the Federal Administration.

# 4. Funding for 2025-28

The SDC funds scientific research on the basis of its mandate. The funds that the SDC invests in research (excluding Switzerland's contribution to selected EU countries) are counted entirely as official development assistance (ODA).

In contrast to the research investments made by other federal offices, the SDC does not dispose of a specific research credit to fund and steer scientific research. ODA funding is used to support the strategic objectives of Swiss international cooperation in line with the respective international cooperation framework credits. Please refer to section 2.1. for further information on the legal basis.

Under the last strategy, an annual average of around CHF 50m<sup>16</sup> was invested in development-related research between 2021–24. Since payments can vary considerably from year to year due to the payment schedules established within a given project cycle, especially for longer-term programmes and projects, the figure of CHF 50m is to be understood as a rough guide only.

Information on individual programmes and projects can be found in the ARAMIS database and in the SDC's own project database.<sup>17</sup> More detailed information is also available in the SDC's project database, which lists all SDC development programmes and projects, including research programmes.<sup>18</sup>

### Box 4: ARAMIS database for federal government research

The ARAMIS database contains information on the Swiss Federal Administration's research projects. Interested parties can find information on research activities that are funded or executed by the Swiss Confederation.

ARAMIS is equipped with a search engine that can be used to search for all public projects in the ARAMIS database.

The research programmes supported by the SDC can be found in the ARAMIS database.

<sup>16</sup> The biggest amount by far (CHF 18m in 2022) was invested in international agriculture and food security research with CGIAR as part of the SDC's multilateral engagement.

<sup>17</sup> www.aramis.admin.ch/; https://www.eda.admin.ch/deza/en/home/projekte/projekte.html

<sup>18</sup> https://www.eda.admin.ch/deza/en/home/activities-projects/projekte-fokus.html

# 5. Key stakeholders and interfaces in research

Switzerland's position as a leading research hub plays an important role in solving global challenges and achieving its international cooperation objectives. Swiss research, with its capacity for innovation and worldwide network, can help reduce poverty and need, support the transformation towards global sustainable development and help developing countries accelerate their efforts to achieve the goals of the 2030 Agenda.

In conducting nationally and internationally focused research programmes and projects on global issues, Switzerland aims to make a visible and useful contribution to sustainable development.

### 5.1. Key stakeholders

The SDC works with the following research partners in Switzerland:

- universities
- the federal institutes of technology
- universities of applied sciences and universities of teacher education
- other research institutions with a focus on sustainable development, poverty reduction and humanitarian aid
- Commission for Research Partnerships with Developing Countries (KFPE)

Cooperation between Swiss centres of excellence (federal institutes of technology, universities, etc.) and their partners in developing countries, for instance in the context of networks, exchange platforms and programmes, also plays an important role.

Internationally, Switzerland cooperates with numerous universities, research centres and international research networks. These include:

- national universities
- international research networks (e.g. CGIAR Centers)
- intergovernmental research institutions (e.g. ICIMOD)
- individual institutions (e.g. IFAKARA Health Institute Tanzania)

New research initiatives will continue to strive towards closer cooperation with stakeholders from civil society, the public sector and the private sector.

# 5.2. Interfaces with research funding institutions in Switzerland

The SDC has a long-standing partnership with the Swiss National Science Foundation (SNSF). This partnership is set to continue in the long term, with a memorandum of understanding (MoU) in place for 2020–2030. In addition to other SNSF programmes, the MoU covers the joint flagship programme *Solution-oriented Research for Development* (SOR4D), which is described in Box 3.

# 5.3. Interfaces with other federal authorities

## Exchange and coordination between federal authorities

An interdepartmental standing committee (KoorA-RF) ensures coordination of research efforts in the Federal Administration. Its main tasks are to coordinate the procedure for drawing up multi-year programmes and to develop guidelines for quality assurance. The multi-year programmes are established in the form of interdepartmental research concepts for each of the eleven policy sectors selected by the Federal Council. The main objectives are to optimise the coordination of research priorities among federal authorities and liaise with the higher education sector and research funding institutions.

In addition to KoorA-RF, the SDC makes use of several other interdepartmental working groups to exchange information and cultivate synergies between federal departments and offices. The three main bodies are the Interdepartmental Committee for International Development and Cooperation (ICIDC), the 2030 Agenda Steering Committee and the Interdepartmental Working Group on International ERI Policy.

In preparation for the 2025–28 ERI period, the various federal authorities worked together within the Interdepartmental Coordination Committee for Federal Policy Research to produce a joint overview of the federal government's research activities, highlighting key challenges and areas for action.

# 6. Organisational aspects and quality assurance

### 6.1. Internal structure

The SDC's Analysis and Research Section is responsible for all of the agency's research-related policy, strategy and coordination tasks.

Most of the SDC's research portfolio (75-80%) consists of projects involving various organisational units at head office and abroad. These units are responsible for managing and administering research funding contributions to international organisations and networks, programme contributions relating to the SDC's strategic priorities, and commissioned research/mandates with a research component. Line managers in organisational units are responsible for the management and quality assurance of research-related activities following project cycle management (PCM) and core contribution management (CCM) guidelines. They oversee calls for research proposals, the awarding of contracts, monitoring, reporting, dissemination and exploitation of research findings. They are also responsible for collaborations with research institutions and carry out regular assessments of this cooperation.

The representations abroad and the SDC's thematic networks also play an important role. Their main responsibility is to develop and share best practices relating to a specific thematic area, linking employees at head office and cooperation offices with partner organisations and researchers abroad.

The SDC's Analysis and Research Section centrally manages 20–25% of the SDC's research portfolio, allocating funds through competitive calls for proposals for collaborative North-South research. This approach enables the SDC to contribute directly to addressing global challenges through innovative funding models. Only 10% of research projects worldwide are dedicated to sustainable development issues<sup>19</sup>. The SDC is providing much-needed funding to address this gap and directly support programmes that advance the 2030 Agenda in developing countries and emerging economies.

### 6.2. Quality assurance

The KoorA-RF issues guidelines on quality assurance in Federal Administration research activities. <sup>20</sup> The concept provides for quality assurance with regard to research management, reporting and evaluation. Strategic programming, the transparent awarding of contracts, provision of information in the ARAMIS database, the publication of results and monitoring of the projects are all central to the quality assurance concept. The guidelines are aimed in particular at persons from federal authorities directly involved in research that supports the fulfilment of the public tasks of the Federal Administration. Any additional quality assurance concepts and documentation developed by units undertaking policy research activities must comply with these administration-wide guidelines.

ODA-funded research is subject to the same requirements as Switzerland's other international cooperation activities. These include results-orientation, effectiveness and efficient use of funds, in addition to standards for academic and scientific research. Research activities are also subject to the overall project cycle management (PCM) and core contribution management (CCM) guidelines. The 'research and innovation' sector code identifies research projects and programmes and their components. In consultation with partners, monitoring and evaluation tools can be developed and processes can be set up to meet specific needs. This is done on the basis of the SDC's requirements and instruments and the research partner's experience and resources.

The SDC and SECO publish reports on the effectiveness of Swiss development cooperation. The reports detail not only of successes but also difficulties and challenges. In addition, around 100 external evaluations are conducted each year at various levels within the organisations. Evaluations foster institutional learning, support decision-making by management and ensure accountability to political authorities and the public.

<sup>19</sup> International Science Council, 2021. Unleashing Science: Delivering Missions for Sustainability, Paris, France. International Science Council. DOI: 10.24948/2021.0

<sup>20 &#</sup>x27;Quality assurance for federal government research', Interdepartmental Coordination Committee for Federal Policy Research guidelines, 26 March 2014 (de).

# **6.3. Knowledge and technology transfer and dissemination of knowledge**

Research findings from contribution programmes are generally published by the research institutions, SDC and SNSF and their implementing partners through the usual research channels.

2019 saw the launch of Knowledge for Development (www. k4d.ch), an online platform for the dissemination of evidence-based knowledge from the Swiss Programme for Research on Global Issues for Development (r4d programme, www.r4d.ch). The platform is curated by the Swiss National Science Foundation (SNSF) and the Swiss Agency for Development and Cooperation (SDC). It provides the public, researchers, policymakers and the media with research-related content such as videos, policy briefs, photo galleries and scientific articles. K4D also showcases SOR4D-funded projects and other SDC and SNSF-supported research.

Experiences and research findings are shared, discussed and assessed at conferences and symposiums and as part of strategic dialogue with the scientific community.

The Commission for Research Partnerships with Developing Countries (KFPE) promotes collaboration with developing and transition countries. Its goal is to ensure that Swiss research effectively contributes to sustainable development by addressing global and local challenges through efficient, effective, and fair partnerships with institutions in these countries. KFPE also raises awareness among the research community, policymakers and the general public about the importance of research in and with developing and transition countries to tackle global challenges. Its conferences and projects foster knowledge transfer and networking between researchers in the South and the North. The SDC is a founding member of the KFPE. It is also an ex-officio member of the KFPE board of trustees.

# 7. Abbreviations

for Federal Policy Research

ARAMIS	Administration Research Action	LAC	Latin America and the Caribbean
	Management Information System	LC3	Limestone calcined clay cement
	(database of Federal Administration	LNOB	Leave no-one behind
	studies)	MENA	Middle East and North Africa
CCM	Core Contribution Management	NCCR	National Centre of Competence in
CDE	Centre for Development and Environment,		Research
	University of Bern	NGO	Non-governmental organisation
CGIAR	Consultative Group on International	NRP	National Research Programme
	Agricultural Research	ODA	Swiss official development assistance
CHF	Swiss francs		(official development cooperation funding)
DDPS	Federal Department of Defence, Civil	OECD	Organisation for Economic Co-operation
	Protection and Sport		and Development
DRR	Disaster risk reduction	PCM	Project cycle management
EPFL	Swiss Federal Institute of Technology –	PHRD	Peace and Human Rights Division
	Lausanne	R4d programme	Swiss Programme for Research on Global
ERI	Education, research and innovation		Issues for Development
ETH	Federal institutes of technology	RIPA	Federal Act on the Promotion of Research
ETH4D	ETH for Development		and Innovation
EU	European Union	SC	2030 Agenda Steering Committee
FDFA	Federal Department of Foreign Affairs	SDC	Swiss Agency for Development and
FPS	Foreign policy strategy		Cooperation
FSO	Federal Statistical Office	SDGs	Sustainable Development Goals
HA	SDC Humanitarian Aid	SECO	State Secretariat for Economic Affairs
IC	International cooperation	SERI	State Secretariat for Education, Research
ICIDC	Interdepartmental Committee for		and Innovation
	International Development and	SNSF	Swiss National Science Foundation
	Cooperation	SOR4D	Solution-oriented Research for
ICIMOD	International Centre for Integrated		Development
	Mountain Development	STS	State Secretariat
ICIPE	International Centre of Insect Physiology	TDR	Transdisciplinary research
	and Ecology	Tech4Dev	Accelerating innovative and beneficiary-
IIT	Indian Institute of Technology		centred technological solutions for positive
IMC	International migration cooperation		impact – EPFL programme
k4d	Knowledge for Development	UN	United Nations
KFPE	Commission for Research Partnerships with		
	Developing Countries		
KoorA-RF	Interdepartmental Coordination Committee		

Abbreviations

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# **Appendix**

### Al. Definition of federal government research

Federal government research can include any type of scientific research that yields findings needed for the fulfilment of the Federal Administration's remit and that the Federal Administration commissions in the public interest. The research serves as an academic foundation for policymaking in the various sectors (see section A3), for measures to implement legal requirements, for legislative work and for the formulation of responses and measures to implement parliamentary procedural requests. The research of the Federal Administration therefore lies at the interface between scientific research and policy/real-world applications. It involves research that adds a scientific and technical dimension to the political debate as well as the foundation for formulating policy objectives. Federal government research can include virtually any type of academic research, including basic research, applied research and development (e.g. the setting up of pilot plants and demonstration facilities). It is provided for by the Research and Innovation Promotion Act (RIPA; <u>SR 420.1</u>), which serves as the statutory framework for federal government research<sup>21</sup>, and by special legislative provisions (see Section A2). It is consistent with the strategies of the federal authorities and may comprise the following measures:

- awarding research contracts (contract research);
- operating federal research institutes (intramural research);
- > carrying out the government's own research programmes in cooperation with university research facilities or research funding institutions such as the Swiss National Science Foundation (SNSF), Innosuisse, etc.
- making contributions to university research facilities to carry out research projects and programmes;
- » making contributions via federal offices to international institutions and organisations for research projects and programmes.

The research of the Federal Administration does not include federal contributions made to the research bodies enumerated in Article 4 of RIPA- namely, research-funding institutions (the Swiss National Science Foundation and the association of the Swiss academies), Innosuisse and higher education research centres (institutes within the ETH Domain, higher education institutions and other institutions within the higher education sector). It also does not include federal contributions made to the research facilities, research institutions and centres of technological excellence set out in Article 15 of RIPA. Likewise excluded from this designation are contributions to international scientific institutions and structural funding organisations.

In practice, federal government research must comply with the five main principles of lawfulness, expediency, effectiveness, efficiency and compliance with scientific standards. The primary responsibility for government research lies with the individual federal offices that carry out, commission or fund the research.

<sup>21</sup> Total revision of the Research and Innovation Promotion Act of 14 December 2012.

### A2. Official mandate

### **Statutory framework**

The legal basis for federal involvement in research and in the promotion of research is provided by Article 64 of the Federal Constitution (<u>SR 101</u>), which states that the Confederation shall promote scientific research and innovation and can set up, take over or operate research facilities.

RIPA (which uses the term 'policy research') provides the legal framework for research activities within the Federal Administration. The Federal Administration is considered a research body insofar as it conducts government-funded research for the fulfilment of its remit or carries out activities to promote research and innovation (Art. 4 let. d). The Federal Administration has an obligation to encourage research and innovation pursuant to RIPA and other specific legislation by conducting its own policy research, including setting up and operating federal research institutes (Art. 7 para. 1 let. e). Article 16 sets out the purpose of federal government research and the forms it can take (see above) as well as guidelines on acquiring third-party funding and on funding to cover indirect research costs (overheads). The establishment of federal research institutes is governed by Article 17. An important aspect of federal government research is its coordination. For this purpose, the Federal Council has set up an interdepartmental coordination committee (Interdepartmental Coordination Committee for Federal Policy Research; KoorA-RF) whose tasks include coordinating the process for developing multi-year research programmes and issuing guidelines on quality assurance (Art. 42). Multi-year programmes for federal government research- are a coordination and planning instrument- that take the form of cross-organisational research concepts. These concepts take into account existing research priorities for higher education institutions, the funding programmes conducted by the SNSF on behalf of the government, and the activities of Innosuisse (Art. 45).

### Specific legislative basis

Besides being anchored in RIPA, federal government research is based on more than 55 specific legislative provisions. These provide for direct evaluation, survey or review mandates that require corresponding research to have been conducted. Other special legislative provisions empower the federal government to subsidise research in specific areas. These provisions contain details on funding policy in line with the Subsidies Act (SubA). Moreover, even where there is no explicit statutory mandate for research, applying and implementing existing law (e.g. adopting guidelines and ordinances) often requires expert knowledge, which should be up-to-date and must therefore be developed through research. This is why research commitments are often part of service-level agreements based on the Federal Administration's new management model (NMM) or are laid down in departmental organisation ordinances for the different offices.

### Commitments under international agreements and parliamentary mandates

In addition to specific legislative provisions, more than 90 <u>international agreements</u>, <u>conventions or memberships</u> contain or imply commitments in terms of research or national research efforts in certain fields. But even in cases where there are no explicit research obligations arising from agreements, commissioned research is vital to some offices in order to maintain necessary international contacts. In this way federal government research enables an exchange on the basis of specialist knowledge which is founded on the current scientific findings of the field.

Parliament itself may issue mandates for drafting decrees, test reports and information through parliamentary initiatives, motions, postulates, interpellations or requests. Federal authorities may need to undertake research activities to fulfil these mandates.

### A3. Coordination of federal government research

### Division of federal government research into policy sectors

In the interests of effective coordination and cooperation between participating federal offices, federal government research is divided into different policy sectors. The policy sectors that require a strategic research plan (Art. 45 para. 3 of RIPA) are defined by the relevant Federal Council Dispatch on the Promotion of Education, Research and Innovation (ERI) (Art. 46 para. 1 let. d of RIPA). To this end, participating federal offices draw up four-year research concepts under the direction of a lead office and with the strategic involvement of external experts (usually a scientific monitoring committee or group). Research concept papers are drawn up in accordance with the principles set out by the Interdepartmental Coordination Committee (KoorARF)<sup>4</sup>, and serve as succinct, comprehensive strategy documents. Their purpose is to inform interested members of the research community inside and outside the federal government as well as the public authorities in general. They also support the coordination of research and the planning and justification of federal research activities. Since the 2004–2007 ERI period, research concepts have been developed for the following 11 policy sectors: 1. health (lead FOPH), 2. social security (FSIO), 3. the environment (FOEN), 4. agriculture (FOAG), 5. energy (SFOE), 6. sustainable spatial development and mobility (ARE), 7. development and cooperation (SDC), 8. security and peace policy (W+T, FOCP, FDFA STS), 9. vocational education and training (SBFI), 10. sport and exercise (FOSPO), 11. sustainable transport (FOT).

### Interdepartmental Coordination Committee for Federal Government Research (KoorA-RF)

The Interdepartmental Coordination Committee consists of members of the directorates/executive boards of the federal offices with their own research and the Federal Financial Administration as well as representatives from the SNSF, Innosuisse, and the Board of the Swiss Federal Institutes of Technology (ETH Board). It is chaired by a member of the Executive Board of the State Secretariat for Education, Research and Innovation (SERI).

Based on RIPA, the Committee's remit includes coordinating the creation of research concepts<sup>22</sup> and drafting quality assurance guidelines.<sup>23</sup> In addition, the Committee coordinates government research in terms of strategy and content (where broad topics require research by several federal authorities), acts as an active platform for sharing best practice in quality assurance, and records the research expenditure and budgetary framework of federal government research activities for publication.<sup>24</sup> It also performs tasks associated with the selection of national research programmes (NRPs) and national centres of competence in research (NCCRs), coordinates between federal government research and other programme-based research activities, and may initiate evaluations on overarching topics relating to federal government research.

Managing the financial resources of federal government research across federal offices and departments is *not* within the Committee's remit, however. In 2006, the Federal Council rejected a recommendation to that effect from the National Council Control Committee CC-N regarding the management of federal government research resources.<sup>25</sup> This control must ultimately be exercised by Parliament, which approves the relevant credits granted to the federal offices, and is effectively ensured by current parliamentary procedure on annual budgetary decisions.

### Working group and secretariat of the coordination committee

A working group composed of research managers from the federal offices is responsible for drafting basic principles, guidelines and reports on federal government research and preparing meetings and resolutions for the Committee. The working group is headed by the secretariat of the Committee, which is part of SERI. The secretariat in turn ensures the flow of information between the federal offices represented on the Committee and oversees its operations. It is responsible for the website <a href="https://www.ressort-forschung.admin.ch">www.ressort-forschung.admin.ch</a>, www.ressortforschung.admin.ch (de, fr), which provides brief information on research priorities in the <a href="https://www.ressortforschung.admin.ch">policy sectors</a>, policy sectors, current research concepts, links to the research pages of the federal offices, and documentation on the <a href="https://www.ressortforschung.admin.ch">legal basis</a> for governmental research activities. This website also contains standardised <a href="factsheets">factsheets</a> that are updated annually by the lead offices in each policy area. These factsheets inform the public about successful research activities and financial resources.

<sup>22</sup> Principles for creating research concepts for the federal government's 11 policy sectors (2025 - 2028 period), KoorA-RF, October 2022 (de).

<sup>23</sup> Quality assurance for federal government research KoorA-RF guidelines, 26 March 2014 (de).

<sup>24</sup> Annually updated monitoring report on research investments for the fulfilment of Federal Administration tasks, Facts and figures (www.ressortforschung.admin.ch).

<sup>25</sup> Federal Gazette 2007 847 (http://www.admin.ch/ch/d/ff/2007/847.pdf).

### **ARAMIS database**

The ARAMIS information system (<a href="www.aramis.admin.ch">www.aramis.admin.ch</a>) contains information on research projects and assessments conducted or funded by the federal government. The aims and remit of the system are set out in the ARAMIS Ordinance (<a href="SR 420.171">SR 420.171</a>): (1) creating transparency regarding funding flows for research and innovation, (2) coordinating projects funded or conducted by the federal government, (3) collecting data for the Federal Statistical Office (FSO) on federal research and development activities, (4) planning and control for research and innovation funding, (5) project management support.

ARAMIS serves as a simple database application in which all research projects and impact studies or assessments conducted by the Federal Administration are listed as individual or cross-referenced projects. ARAMIS therefore serves as a pillar of quality assurance for federal government research and is anchored accordingly in the Committee's quality assurance guidelines. To support research coordination and planning and the efficient use of resources, information is compiled from ARAMIS and submitted annually to the Committee. This information includes details on types of research (intramural research, contract research, grants), the organisations executing the research, and the expenditure of the federal offices. This reporting keeps the Committee up to date on the development and utilisation of funds within individual offices. The financial data is published annually in the form of a monitoring report.<sup>6</sup>

### A4. Committee goals for 2025-28

The Interdepartmental Coordination Committee for Federal Policy Research has the following overarching goals for 2025–28:

- (1) The Committee has adopted principles for a coordinated approach to the development of the policy research concepts for the various sectors. The research concepts serve as a planning instrument for the federal offices in the 2025–28 funding period for the implementation of research in accordance with the priorities. In addition, as part of the work the Committee in the lead-up to the 2025–28 ERI period, an overview of Federal Administration research activities has been drawn up in a cross-departmental joint document. The overview includes an examination of key future challenges and core areas for Federal Administration research activities.
- (2) There is a long-term plan in place for the five key cross-organisational topics (1) sustainable behaviours, (2) sharing society, (3) data protection, (4) smart regions, and (5) health and the environment that were identified ahead of the 2021–24 ERI period and had been the focus of preliminary work. The competent authorities will continue to pursue this plan in the 2025–28 period in a needs-oriented and coordinated manner.
- (3) The Committee has decided that several federal offices should proactively present important research topics to the Committee for discussion, to raise awareness of the topics and to aid the coordination of research in terms of content. If necessary, information, statements, recommendations and concerns may be formulated under the Committee's mandate for the attention of the Federal Council. For the purposes of coordination, the Committee will also periodically review and discuss planned or completed tenders for research on major topics.
- (4) Changes have been made to guidelines governing the tasks and functions of federal representatives in national research programme (NRP) steering committees to allow them to better represent the federal government's interests. The changes are designed to allow the representatives to contribute to the evaluation of preliminary proposals and pilots and offer expertise on the use and dissemination of important research results in the Federal Administration. This successful approach will be maintained in the 2025–28 period, with a particular emphasis on the sharing of expertise between NRP representatives and the Committee.

Further information: www.ressortforschung.admin.ch (de)

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