



EVALUATION 2010/1
**SDC'S RESEARCH
RELATED ACTIVITIES**



Schweizerische Eidgenossenschaft
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**Swiss Agency for Development
and Cooperation SDC**

Evaluation of

SDC's Research Related Activities

Commissioned by the Corporate Controlling Section
of the Swiss Agency for Development and Cooperation (SDC)

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Bern, March 2010

Evaluation Process

Evaluations commissioned by SDC Senior Management were introduced in SDC in 2002 with the aim of providing a more critical and independent assessment of SDC activities. Joint SDC/SECO programs are evaluated jointly. These Evaluations are conducted according to DAC Evaluation Standards and are part of SDC's concept for implementing Article 170 of the Swiss Constitution which requires Swiss Federal Offices to analyse the effectiveness of their activities. SDC's **Senior Management** (consisting of the Director General and the heads of SDC's departments) approves the Evaluation Program. The **Corporate Controlling Section**, which is outside of line management and reports directly to the Director General, commissions the evaluation, taking care to recruit evaluators with a critical distance from SDC.

The Corporate Controlling Section identifies the primary intended users of the evaluation and invites them to participate in a **Core Learning Partnership (CLP)**. The CLP actively accompanies the evaluation process. It comments on the evaluation design (Approach Paper). It provides feedback to the evaluation team on their preliminary findings and on the draft report.

Evaluation research shows that involving key stakeholders in generating recommendations leads to a higher rate of implementation. During a 1 ½ day Synthesis Workshop, the CLP validated the evaluation findings and conclusions and, with the facilitation of the SDC Evaluation Officer and the Evaluation Team, elaborated recommendations and lessons learned for SDC from their perspective. These are noted in the Agreement at Completion Point (ACP). The ACP was forwarded to the Director of Global Cooperation (the department in which the Research Desk is located) who drafted the Senior Management Response which was subsequently approved by SDC's Directorate (the Director General and the heads of SDC's Departments). The ACP of the CLP and the Senior Management Response are published with the Final Evaluators' Report. The Senior Management Response forms the basis for future rendering of accountability.

For further details regarding the evaluation process see the Approach Paper in the Annex.

Timetable

Step	When
Evaluation Programme approved by Senior Management	September 2008
Approach Paper finalized	July 2009
Implementation of the evaluation	September – November 2009
Agreement at Completion Point	December 2009
Senior Management Response in SDC	March 2010

I Long Evaluation Abstract

Donor	SDC
Report title	Evaluation of SDC's Research Related Activities
Geographic area	Africa, Asia, Latin America
Sector	Other: Research
Language	English
Date	December 2009
Authors	The Policy Practice Limited, UK: Andrew Barnett, Gareth Williams, Anna Khakee

Subject Description

This report is an independent evaluation of the Swiss Agency for Development Cooperation's (SDC) support for research related activities. The evaluation focuses on four sets of issues:

- Policy: Assessment of relevance and adequacy of SDC's strategies and policies, including an assessment of how research and related policies are made and lessons learned.
- Portfolio: Assessment of relevance of the strategic orientation and composition of SDC's research.

Results: An assessment of research results against policy objectives in terms of relevance, quality, utilisation and developing country research capacity building.

Management: Assessment of the quality of SDC's management of its research activities including assessment of its decentralised management approach, and its promotion of research partnerships. This will cover the effectiveness of SDC's institutional set-up for achieving the objectives of its research policy and research master plan.

Evaluation Methodology

The purpose of the evaluation is to assist SDC to render accountability for SDC's past actions and to contribute to improvement of SDC's future performance in supporting research related activities by identifying the critical research policy and management issues. Research-related "back-stopping" or consultancy financed by SDC was not within the scope of the evaluation. Similarly the evaluation did not cover the performance of the researchers that were supported by SDC.

Seven methods were used to obtain the necessary evidence: 1) a review of policy and legal documentation, 2) key informant interviews in Switzerland, 3) electronic questionnaire surveys of SDC staff, Swiss researchers, and research partners in the south, 4) an analysis of the research portfolio, 5) a review of project documentation (10% sample), 6) a review of existing evaluations of SDC research activities, and 7) case studies illustrating the working of different SDC research funding instruments.

Major Findings and Conclusions

Overall this evaluation takes a rather positive view of the research activities that SDC has funded in the past. SDC has a proud record of supporting effective and relevant research. While SDC has spent only a modest share of its research funds in Switzerland, it has succeeded in stimulating a vibrant development research community that has demonstrated its ability to undertake high quality and relevant research. Strong capacity and critical mass appears to have been achieved in several areas, including environmental science,

agriculture, water and sanitation and health systems, as well as across several social science disciplines. SDC has made a serious investment in building research capacity in developing and transition countries, in particular through promising North-South, West-East research partnership models that appear to be strongly appreciated by all parties. SDC has also helped to develop some commendable models for research programme management, as well as an effective joint funding mechanism with the Swiss National Science Foundation.

In spite of this positive record, there is a strong sense of dissatisfaction with SDC's present approach to funding research. The research community in Switzerland points to a loss of technical competence in SDC and a loss of interest in research as an instrument of development. Within SDC there is increasing questioning of the benefits of funding research, and criticism of a portfolio that has become fragmented, unmanageable, overly affected by personal and political interests, insufficiently exposed to competition and impossible to monitor due to the weakness of information systems. The good intentions of SDC's many excellent research policy statements are let down by weak management practices that prevent research activities being harnessed most effectively in support of SDC's strategic goals. There is a particular disconnect between SDC's investment in research and the use of research findings at the operational level. While there are many individuals in SDC who remain very interested and committed in the subject, there is a sense that research for development has become a rather sideline issue. Research funding, while substantial, is well below the target that was set in 2002 of spending 6% of SDC's budget on R&D. Research management functions appear to be badly under-resourced to the extent that it will be very difficult to improve and demonstrate the performance of SDC's research activities, and to establish their place more firmly within the organisation.

The concerns raised by this evaluation point to the need for a fresh approach. Business as usual is not an option, in particular because the context for SDC's research funding is changing fundamentally. SDC's reorganisation raises serious questions about whether and in what form research will be required in the new structure. Other developments in the domestic political context, such as the closer relationship between SDC and the Federal Ministry of Foreign Affairs and the Swiss Foreign Policy for Science create further pressure for change. Finally, rapid change in the international development and aid context mean SDC will need to embrace new themes and funding modalities. SDC's ability to embrace these changes will depend on it having a strong research function to scan the horizon for new issues and to determine how the agency should respond.

Summary Recommendations

The evaluation makes a number of recommendations of about what SDC needs to change to improve its support for research related activities. These are grouped under the following five headlines:

- develop a new research policy.
- define the organisational structures required to implement the new research policy.
- define and adopt "essential standards" for results based research management, including Managing for Development Results and improved procurement standards.
- adapt existing information systems to facilitate strategic oversight, research project management, knowledge management and communication of research results which addresses.
- develop mechanisms to maximize the use of the results of research, including within SDC's own operations.

II Senior Management Response¹ to the Evaluation of SDC's Research Related Activities

Introduction

SDC senior management takes note of the final report "Evaluation of SDC's Research Related Activities"² dated 20 January 2010 and the "Agreement at Completion Point of the Core Learning Partnership (CLP)" dated 19 January 2010 and thanks all those involved for the detailed presentation and identification of problems related to SDC's research-related activities³. It appreciates the quality of the evaluation report.

The evaluation team positively evaluated, in particular, the support of relevant research; the building of research capacities in partner countries, namely via research partnerships; the role of SDC in creating a "development research community" in Switzerland; and the joint funding mechanism with the Swiss National Science Foundation (SNSF).

The findings of the evaluation criticize certain aspects, among which: no shared understanding of what "research" constitutes; no clear relation of SDC-funded research to the strategic objectives of Swiss development cooperation; the lack of a convincing rationale as to why SDC supports development research; the widespread lack of transparent, logical criteria as to what should be funded and what not; little exchange of content between SDC and the universities; and insufficient application of the results.

Principles guiding future SDC investment in research

1. SDC senior management acknowledges the fact that research and innovation are decisive factors for sustainable economic, social and ecological development and for solving global problems, and are among the key drivers of an inclusive globalization.
2. SDC's investments in research must be coherent with the mandate⁴ and the long-term strategic objectives of SDC. Within this framework, SDC will continue to fund research to the same extent (reference figure: around CHF 40 million per year under decentralized responsibility and around CHF 10 million per year under central responsibility).
3. Taking into account the evaluation and the recommendations of the CLP, senior management hereby defines the approach for an efficient and effective support of research. The 1993 and 2002 research policies are hereby replaced.

¹ The original language of the SMR is German.

² This concerns the SDC's entire research portfolio (under the framework credits of the South Message and Eastern Europe Message). It does not cover the promotion of research in the new EU member states within the context of the European policy.

³ Research is to be distinguished from, among other things, (academic) training, further education, practical internships (cf. traineeships for junior professional officers); consulting mandates and contract mandates at universities for the implementation of development projects.

⁴ The legal bases for research within the context of development cooperation and cooperation with the East: Federal Act on International Development Cooperation and Humanitarian Aid, dated 19 March 1976; Ordinance on International Development Cooperation and Humanitarian Aid dated 12 December 1977/Federal Act on Cooperation with Eastern Europe dated 24 March 2006; Ordinance on Cooperation with Eastern Europe dated 6 May 1992, and the respective Messages.

Prioritisation of research objectives

4. Senior management is committed to setting a clear priority for research and defines as its main objective the *production of new knowledge, innovative approaches and practical application of scientific knowledge*.
5. A distinction is made between:
 - a) The production of *knowledge* as a "*global public good*" (via research contributions)
 - for solving development, transitional and global problems
 - for evidence-based policy and thematic political dialogue
 - b) The production of *knowledge for SDC* (via research mandates)
 - to directly support the policy and program work of SDC's head office and coordination offices
 - to enhance the quality of Swiss international cooperation.
6. While it is important to build up research institutions and support national science systems, in view of the available funds this is not an objective per se of SDC-supported research programs. However, research activities must be designed so as to contribute to building up and enhancing research expertise and research networks in development-relevant fields, and to make a positive impact on the institutional research environment in Switzerland and in partner countries.
7. The research concept⁵ for the *development and cooperation* policy area deals with research policy and strategic issues and is designed as an overarching reference and orientation framework for research support during a legislature period. The national and international contexts are taken into account.

Research support: types and principles

8. It is necessary to distinguish between research mandates for scientific studies/analyses and various forms of research contributions, i.e., contributions to international organizations/institutions/networks; to research programs in the context of global programs or priority themes; and contributions to research partnership programs/funds.
9. In the case of research mandates, these are SDC projects carried out by third parties. Full steering responsibility lies with SDC as the client. Contributions are financial participations. The division of responsibilities for steering and accountability is negotiated with the partner organizations and contractually determined.
10. The following key principles must be taken into consideration for research contributions:
 - They must be related to the long-term strategic objectives and thematic priorities of Swiss development cooperation.
 - Research freedom in terms of formulating research questions and selecting methods must be respected.

⁵ In 1997, the Federal Council decided that a research concept must be developed for each policy area. SDC has prepared two research concepts, one for the period 2004 – 2007 and one for [2008-2011](#). The next research concept will cover the 2013 – 2016 period.

- When granting funds to research programs and projects, the principle of competition must apply provided the contributions are not part of a strategic partnership such as CGIAR.
 - The focus must be on research which is excellent, development-relevant and innovative.
 - Research cooperation must be on a partnership basis.
11. If appropriate and important, SDC collaborates with other donors, and coordinates its research support on a national and international level.

Need for reform of North-South research programs/funds

12. SDC senior management sees no fundamental need for reform of the decentralized part of the research portfolio, i.e. research mandates and research contributions to international organizations/institutions/networks as well as program contributions related to the strategic priorities of global cooperation, regional cooperation programs and cooperation programs in Eastern Europe. The main focus needs to be placed on quality assurance and results-oriented management.
13. However, SDC senior management has identified a major need for action in the thematically and regionally unbound North-South programs/funds⁶, which it finances partly or wholly with approximately CHF 7 million a year and which are managed centrally by the SDC's research desk.
14. SDC senior management intends to optimize this centralized area of the research portfolio by setting up a fund on global issues⁷:
- The funds available to date for North-South programs will be combined and invested in a competitive fund for research programs on global issues, in cooperation with the Swiss National Science Foundation (SNSF) e.g. in line with the "matching fund" principle. Swiss research institutions (including ETHZ/EPFL and universities of applied science) apply for these combined funds in a competitive process (according to SNF practice). The possibility of collaborating with the Swiss Federal Commission for Technology and Innovation (CTI), with a view to application-oriented research and innovation promotion, will be explored.
 - *Planned format as of 2011/12*: Periodical tender process (every 2-3 years) for research programs for consortia of research institutions in Switzerland and developing countries; focus on solving global problems (1-2 research topic on global issues per tender); research partnerships between research institutions in Switzerland and developing countries (according to the DAC country list), each partnership for a duration of 6-8 years.
 - The research desk, part of the Analysis and Policy (A +P) Section, is responsible for SDC contributions to the fund, strategic steering and monitoring of the overall program within SDC, and acts as the central point of contact for the SNSF.

⁶ EPFL-SDC Fund, Jeunes Chercheurs, Echanges Universitaires, research partnerships with developing countries
 SNF-SDC, promotion of research partnerships between developing and transition countries and Swiss
 universities of applied sciences, ETH North-South: RFPP: Research Fellow Partnership Programme, NCCR
 North-South

http://www.deza.admin.ch/de/Home/Themen/Rechtsstaatlichkeit_Demokratie/Prozess_und_Methodenwissen_Forschung/Forschung/Foerderinstrumente

⁷ This covers all global issues with which SDC deals (i.e. not only those which come under SDC's global programs).

- Units within Global Cooperation (GC), Regional Cooperation (RC) and Humanitarian Aid (HA) propose themes for tenders and, as part of their thematic/technical remit are responsible for monitoring the content of selected research programs, cooperating with the involved research institutions, quality assurance, knowledge transfer and application of the results. To this end, they make the necessary human resources available for the entire duration of a program.
 - The finances for this fund (indicative annual budget of approx. CHF 10-12 million) are defined in the context of SDC messages.
15. SDC senior management commissions the management of GC to draw up the details of this reform and conduct the relevant negotiations with the SNSF, and to inform the research institutions about the realignment of research funding in this area.
16. For the development of a concept for the fund for research on global issues and its implementation, a support group with representatives from the global programs, 'Focal Points' and SDC domains will be established, which will be coordinated by the research desk. Where appropriate representatives of universities, federal institutes of technology and universities of applied science will be involved based on their expertise.

Management of research mandates and contributions, responsibilities

17. SDC senior management requires that minimum quality standards be complied with and declares as binding the principles of PCM for research mandates and CCM⁸ for core contributions to research organizations/institutions (corresponding adjustment for program contributions) for results-oriented management.
18. To enhance transparency and enable the statistical calculation of research investments (according to SFSO, OECD standards), "research" will be incorporated as a SAP characteristic and all federal institutes of technology, Swiss universities and universities of applied science will be recorded in the SAP database. The possibility of transferring responsibility for statistical calculation and data collection to SDC's statistics will be considered.
19. Institutional responsibility is governed on a decentralized basis for research mandates; for contributions to international organizations/institutions/networks, responsibility lies with GC and RC, HA or CEE (Cooperation with Eastern Europe); for contributions to local research institutions, with RC, HA / CEE; for program contributions regarding global or priority themes, with GC (global issues) or RC (thematic responsibility). The fund for research on global issues is centrally managed by the research desk/ A+ P (around 20% of the research investment).
20. Line management of the organizational units of GC, RC, HA or CEE is responsible for the management and quality assurance (including tender process/awarding, monitoring, reporting and dissemination or application of the research results) of research mandates and contributions and for cooperation with research institutions and regular evaluation of such cooperation.

⁸ Project Cycle Management / Core Contribution Management

21. The following tasks in particular are centrally performed by the research desk/A+P for SDC as a whole:

- All activities related to research policy and strategy and coordinating tasks at the national and international level related to research and research promotion
- Strategic steering and monitoring of the 'global issues' fund
- Point of contact for SNSF and SER (State Secretariat of Education and Research) on all research-related matters
- Overview of the research portfolio
- Coordination of an internal support group/sounding board for the definition and selection of research priorities and the discussion of research-relevant issues
- Organization of an annual meeting with important institutions related to research (SER, SNSF, ETH, universities) at senior management level
- Organization of regular meetings between the important research institutions/research scientists and interested/responsible program officers, with the aim of jointly assessing cooperation and results
- Support and advice to all organizational units on how better to put research findings into operational practice and on the alignment of research mandates and contributions.

More effective utilization of research results

22. Research findings from contribution programs are published by research institutions or scientists over the normal research channels. A communication plan for the exchange, uptake, application and use of new knowledge must in future be an integral part of research programs.

23. At least twice a year, research institutions must make formal contact either with the funding section or the funding coordination office as well as the networks and sections interested in the content of their research, during which expectations are exchanged and innovative, relevant research results presented, jointly discussed and evaluated, and – where practical – documented and disseminated in policy briefs.

24. The responsible units make innovative research results which are relevant for SDC activities available on the IntraWeb via the research desk or on network sharewebs, or publish them in other appropriate media.

25. Heads of departments, divisions, and sections ensure the commitment of their staff to incorporating research results into their planning and implementation work. Line managers of organizational units also ensure that the research findings from contribution programs are incorporated into thematic networks.

26. The Knowledge and Learning Processes Division supports operational units, networks and contribution recipients with the exchange or transfer of knowledge.

Agreement at Competition Point (ACP) of the Core Learning Partnership (CLP)

General Appreciation

The report provides a thorough and comprehensive view of the wide range of research activities supported by SDC. The report is readily understandable, provides a sound body of evidence, and contains clear proposals for change. It describes a general shift of emphasis in SDC from technical to managerial expertise and the limited interaction of most staff with researchers. The report identifies the absence of a common understanding of what constitutes 'research' within SDC and a lack of differentiation of the different objectives and instruments for funding research. The CLP agrees that there is an urgent need to address the weaknesses identified by the evaluation team in particular in part three of the evaluation report.

A few criticisms of the report were raised. The discussion of the value of SDC funding research by CGIAR and other multilateral agencies is limited and lacks substantial evidence. The report sometimes fails to sufficiently differentiate views and attitudes towards research in different departments in SDC. In addition, the report could have included more practical or concrete guidance drawing on the expertise of the evaluation team, and their experience of how other research donors are addressing these issues.

Lessons from the Evaluation

The CLP drew eight overall lessons from the evaluation:

- 1) Research is essential for innovation in SDC and its partners.
- 2) Do not assume that research takes a single form and serves a single purpose. Research related funding takes many forms, builds on different outcome hypotheses and, thus contributes to a number of objectives. Therefore it requires a range of instruments specific to each purpose.
- 3) Recognise that the results of research and research related activities must demonstrate added value to the achievement of SDC's goals in order to keep it high on the agenda.
- 4) Find ways to anchor research more firmly in SDC at the institutional level while recognising that success often depends on individual enthusiasm and energy.
- 5) SDC needs a better database of research activities and results in order to manage its investment and knowledge better.
- 6) SDC needs to do more to communicate relevant research findings to users or potential constituencies in order to maximise the benefit.
- 7) The participatory process used in the evaluation and workshops enabled the aggregation of information and synthesis of key issues. Such a process is necessary to build consensus and ensure wide ownership of the recommendations.
- 8) During the implementation of the recommendations it will be important to go back to the report and utilise the detailed evidence provided.

Recommendations of the Core Learning Partnership

1. SDC should develop a new research policy.

The Core Learning Partnership shares the view of the evaluation report that SDC needs to be clearer in explaining the reasons for funding and supporting development research, and more strategic in finding ways to achieve its objectives. This requires a new research policy with clear status and applicability across SDC that defines the role and weight of research in SDC in general and of the different forms/categories of research in particular, and also serves as a basis for the Research Master Plan (requested at the federal level). The task of drafting the new research policy should be the responsibility of the Analysis and Policy section, and should be completed by mid-2010. The research desk should have responsibility for coordinating the process, and should form a task force involving operational and thematic staff. The CLP considered it crucial for SDC to put in place stronger mechanisms, lines of responsibility and clear messages from senior management to ensure that research policy is actively developed, implemented and monitored across the organisation.

The CLP agreed that the new research policy should:

- Provide a clearer vision and rationale on the value of research to SDC in its work at policy, country and thematic level, including capacity building in partner countries and Switzerland.
- Recognise that there are different types of research based on different logics. The new research policy should clearly define the different types of research related funding and explain how they contribute to SDC's objectives according to explicit outcome hypotheses (models of change). SDC's future research instruments should be closely matched to these different types and objectives.
- Take account of the changing national and international context for development research, including the development of the Swiss Foreign Policy for Science.
- Focus more on SDC's evolving long-term thematic priorities for development and transition, while also taking greater account of the areas of Swiss research competence.
- Simplify the portfolio. Concentrate on fewer actions, and promote research programmes rather than individual projects.
- Include an explicit policy statement explaining how SDC wishes to engage with Swiss research institutions and identify their respective roles in promoting international development and transition. This would request clear principles and rules, transparent criteria for funding decision vis-à-vis the Swiss universities.
- Aim to ensure greater coordination and harmonisation between research funders in order to avoid duplication of effort, and enable greater responsiveness to development needs at the policy, country and thematic level.
- Adopt an explicit spending target for research differentiated by categories of research linked to SDC's strategic objectives.

2. SDC should define the organisational structures and the respective roles and responsibilities required to implement the new research policy.

In connection to the work of the task force under point 1, SDC must define clearly the organisational structures required to implement the new research policy in the context of SDC's reorganisation. SDC should:

Reaffirm the role of the research desk by clarifying its responsibilities and ensuring sufficient resources are provided to fulfil its tasks through in house staff capacity and competitive outsourcing where appropriate.

Provide a statement clarifying the role of the thematic focal points and the thematic responsible persons ("Themenverantwortliche") in promoting, stimulating, managing and capitalising on research.

Clarify the role of the COOFs in terms of initiating, funding, managing and monitoring research. This includes an explanation of their role vis à vis centrally and regionally funded research.

Invest more in strengthening SDC's relationships with its research co-funders (including more regular high level contact with SNF, SER). This must include a clearer statement on the part of SDC about what it expects to contribute to and get out of each partnership.

3. SDC should define and adopt "minimal standards" for results based management in research activities.

The Quality Assurance section should lead this work and establish a working group including thematic focal points and appropriate thematic and operational representatives (and possibly external consultants). The general principle is that the operational line commissioning the research should be responsible for ensuring that results based management standards related to research activities are applied. New systems should be put in place in 2011 based on the following:

Managing for Development Results

Develop guidelines on how to apply results based management to the different forms/categories of research related activities. This should include systems for tracking outcomes and impacts through the results chain in relation to research, and developing staff skills accordingly.

Define an improved format for progress reports focussing on information requirements for results based management.

Develop a results matrix for each research related activity in function of the different types of research, and ensure that these are applied systematically and regularly updated.

Develop a more strategic approach to deciding which research projects or programmes should be evaluated. Ensure that evaluations on research focus more on the quality of SDC management, and outcome and impact levels.

Procurement standards

Progressively open up SDC research funding on a more competitive basis.

Open up SDC research funding on a more international basis, both through participation in EU funding programmes and by opening bidding to research projects or programmes to organisations outside Switzerland.

Apply clear principles and rules, transparent criteria and processes for funding decisions aligned with SDC's strategic objectives.

4. SDC should adapt existing information systems to facilitate strategic oversight, research portfolio management, knowledge management and communication of research results.

- The CLP agreed that SDC requires improved IT systems bringing together all of the information that SDC research managers require, including a single point of access to research project documentation. The key principle is to use existing systems, in particular SAP and ARAMIS, and to enhance them by including more information specific to research and knowledge management. Key measures include:
- Amend the list of SAP criteria to include categories of research oriented or related funding (taking into account the information requirements at the federal level).
- Improve the documentation of research outputs, and make these accessible through SDC's information and knowledge management systems, and an improved searchable database providing access to research findings and identifying where particular research competences are located. One option would be to contract out this task to an outside organisation.
- Provide adequate information to monitor the strategic orientation of the research portfolio.

5. SDC should develop mechanisms to maximize the use of the results of research, including within SDC's own operations.

- The CLP agreed that better communication of research results within and outside SDC is essential to capitalise on research investment and to maximise its contribution to SDC's strategic goals. The following priorities were agreed:
- Ensure that research management procedures emphasise the importance of communications, for example by requiring all research projects or programmes to allocate 10% of their budgets for communications and dissemination.
- Use briefs as dissemination instruments and entry points for further communication, and ensure that this becomes a standard practice.
- Publish more frequently research news within SDC and outside media, including SDC's website, intraweb and thematic network newsletters.
- Commission more research on policy and operational questions affecting SDC's own work.
 - Ensure greater involvement of research users to define their knowledge needs.
- Encourage the building of networks between researchers and users in target countries, including greater contact and exchange between researchers and policy makers and other constituencies.
- Consider how SDC might work more effectively with the private sector and with local universities in developing countries in order to stimulate research and innovation inside the partner country. In addition, require collaboration, outreach and funding partnerships with the private sector in Switzerland.
- Where appropriate, work through coordinated partnership mechanisms to harmonise SDC's support to research and share findings with other donors, in particular by playing an active role in the International Forum of (Development) Research Donors (IFORD).

III Evaluators' Final Report

Evaluation of SDC's Research Related Activities

Commissioned by the Corporate Controlling Division
of the Swiss Agency for Development and Cooperation (SDC)

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The views contained in this report are those of the authors alone
and do not necessarily represent the views of SDC.

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Annex 7 – Report on the results of the three electronic questionnaires

Annex 8 – Report on the case studies

Abbreviations and Acronyms

ACP	Agreement at Completion Point
ARAMIS	Administration Research Actions Management Information System
COOF	Cooperation Office
COST	European Cooperation in Science and Technology
CLP	Core Learning Partnership
CGIAR	Consultative Group for International Agricultural Research
CSRS	Centre Suisse de Recherches Scientifiques en Côte d'Ivoire
CTI	Innovation Promotion Agency
DAC	Development Assistance Committee (OECD)
DDC	Direction du développement et de la coopération - SDC
DEZA	Direktion für Entwicklung und Zusammenarbeit – SDC
EADI	European Association of Development Research and Training
EANNET	East African Network for Typanosomiasis
EAWAG	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz - Aquatic Research
ECDPM	European Centre for Development Policy Management
ETHZ	Eidgenössische Technische Hochschule Zürich
EPFL	Ecole Polytechnique Fédérale de Lausanne
ESTROM	Environmental Science and Technology in Romania
FDFA	Federal Department for Foreign Affairs
GFATM	Global Fund to fight AIDS, TB and Malaria
ICIMOD	International Centre for Integrated Mountain Development
ICIPE	International Centre of Insect Physiology and Ecology
IDRC	International Development Research Center (Canada)
IDS	Institute of Development Studies UK
IFF	Institute of Federalism, University of Fribourg
IHEID	Graduate Institute of International and Development Studies
IZFG	Interdisciplinary Centre for Women and Gender Studies, University of Bern
KFPE	Commission for Research Partnerships with Developing Countries
NCCR NS	National Centre of Competence in Research North-South Programme
ODA	Overseas Development Assistance
ODI	Overseas Development Institute (UK)
OECD	Organisation for Economic Co-operation and Development
SANDEC	Department for Water and Sanitation in Developing Countries EAWAG
SAREC	Swedish Agency for Research Cooperation with Developing Countries
SCOPES	Scientific Cooperation with Eastern Europe
SECO	State Secretariat for Economic Affairs
SER	State Secretariat for Education and Research
SDC	Swiss Agency for Development Cooperation
SNSF	Swiss National Science Foundation
STI	Swiss Tropical Institute
WHO	World Health Organisation

Executive Summary

Subject Description

This report is an independent evaluation of the Swiss Agency for Development Cooperation's (SDC) support for research related activities. The evaluation focuses on four sets of issues:

- Policy: Assessment of relevance and adequacy of SDC's strategies and policies, including an assessment of how research and related policies are made and lessons learned.
- Portfolio: Assessment of relevance of the strategic orientation and composition of SDC's research.
- Results: An assessment of research results against policy objectives in terms of relevance, quality, utilisation and developing country research capacity building.
- Management: Assessment of the quality of SDC's management of its research activities including assessment of its decentralised management approach, and its promotion of research partnerships. This will cover the effectiveness of SDC's institutional set-up for achieving the objectives of its research policy and research master plan.

Evaluation Methodology

The purpose of the evaluation is to assist SDC to render accountability for SDC's past actions and to contribute to improvement of SDC's future performance in supporting research related activities by identifying the critical research policy and management issues. Research-related "back-stopping" or consultancy financed by SDC was not within the scope of the evaluation. Similarly the evaluation did not cover the performance of the researchers that were supported by SDC.

Seven methods were used to obtain the necessary evidence: 1) a review of policy and legal documentation, 2) key informant interviews in Switzerland, 3) electronic questionnaire surveys of SDC staff, Swiss researchers, and research partners in the south, 4) an analysis of the research portfolio, 5) a review of project documentation (10% sample), 6) a review of existing evaluations of SDC research activities, and 7) case studies illustrating the working of different SDC research funding instruments.

Major Findings

The picture is complex: SDC has a good record in supporting research, but at the same time the present situation is regarded as unsatisfactory, and SDC will need to adapt its approach to reflect a changing external context and internal reorganisation.

Overall this evaluation takes a rather positive view of the research activities that SDC has funded in the past. SDC has a proud record of supporting effective and relevant research. While SDC has spent only a modest share of its research funds in Switzerland, it has succeeded in stimulating a vibrant development research community that has demonstrated its ability to undertake high quality and relevant research.

Strong capacity and critical mass appears to have been achieved in several areas, including environmental science, agriculture, water and sanitation and health systems, as well as across several social science disciplines. SDC has made a serious investment in building research capacity in developing and transition countries, in particular through

promising North-South, West-East research partnership models that appear to be strongly appreciated by all parties. SDC has also helped to develop some commendable models for research programme management, as well as an effective joint funding mechanism with the Swiss National Science Foundation.

In spite of this positive record, there is a strong sense of dissatisfaction with SDC's present approach to funding research. The research community in Switzerland points to a loss of technical competence in SDC and a loss of interest in research as an instrument of development. Within SDC there is increasing questioning of the benefits of funding research, and criticism of a portfolio that has become fragmented, unmanageable, overly affected by personal and political interests, insufficiently exposed to competition and impossible to monitor due to the weakness of information systems.

The good intentions of SDC's many excellent research policy statements are let down by weak management practices that prevent research activities being harnessed most effectively in support of SDC's strategic goals. There is no common institutional view within SDC of what constitutes 'research', its role and importance to SDC. SDC lacks the policy levers necessary to steer the portfolio in a particular direction and does not have an overall view of what research related activities it is currently funding. Practical guidance is lacking on how staff are expected to implement SDC's research policy and principles.

Consequently, there is little clarity in the types of the results SDC seeks from its investment in research. The evidence suggests that neither SDC nor the institutions it supports have adequate systems in place for documenting the results achieved. However, there are notable exceptions. There is a particular disconnect between SDC's investment in research and the use of research findings at the operational level. Most of SDC's support to research is not aimed at meeting SDC's operational requirements, and is largely in the form of contributions to programmes whose objectives and management are outside SDC's direct influence or responsibility. SDC staff rarely use the results of the research funded by SDC.

While there are many individuals in SDC who remain very interested and committed in the subject, there is a sense that research for development has become a rather sideline issue. Research funding, while substantial, is well below the target that was set in 2002 of spending 6% of SDC's budget on R&D. Research management functions appear to be badly under-resourced to the extent that it will be very difficult to improve and demonstrate the performance of SDC's research activities, and to establish their place more firmly within the organisation.

The concerns raised by this evaluation point to the need for a fresh approach. Business as usual is not an option, in particular because the context for SDC's research funding is changing fundamentally. SDC's reorganisation raises serious questions about what form of research will be required in the new structure. Other developments in the domestic political context, such as the closer relationship between SDC and the Federal Ministry of Foreign Affairs and the Swiss Foreign Policy for Science create further pressure for change. Finally, rapid change in the international development and aid context mean SDC will need to embrace new themes and funding modalities.

SDC's ability to embrace these changes will depend on it having a strong research function to scan the horizon for new issues and to determine how the agency should respond.

Recommendations

The evaluation makes a number of recommendations of about what SDC needs to change to improve its support for research related activities. These can be grouped under the following six headings headlines:

The conceptual and policy framework

1. SDC needs to reach a clearer vision on whether and how to support research. There needs to be a revised policy statement with clear status and applicability across SDC.
2. In revising its policy SDC needs to take greater account of the changing context for development research.
3. SDC needs to define different types of research in terms its strategic objectives, and develop more explicit models of change explaining the logic of different types of research and how they contribute to SDC's objectives.
4. SDC should develop an explicit policy statement explaining how the agency wishes to engage with Swiss research institutions and identifying their respective roles as partners in promoting international development.
5. SDC needs to assign responsibility for research policy and its implementation to a suitably high level (e.g. appointment of a chief scientist, or chair of an SDC scientific committee).
6. SDC needs to develop a policy on how to apply the Paris Principles to research policy (i.e. coordination and harmonisation, alignment with national priorities).
7. The Research Master Plan (Forschungskonzept) needs to become more meaningful as a prospective strategic planning mechanism.

Portfolio Management

8. SDC needs to view its research activities more in terms of a portfolio, in order to ensure strategic direction, to maximise the contribution of research to SDC's broader objectives, and to ensure lesson learning and synergies between research activities.
9. SDC needs to simplify the portfolio by reducing the total number of actions and making greater use of research programmes rather than individual projects.
10. SDC needs to improve its information management to enable senior management to obtain a strategic view of the research portfolio.
11. SDC should adopt a more rules based and institutional approach to funding decisions based on transparent criteria and SDC's broader strategic objectives. SDC should reduce the extent to which political and personal decisions influence research funding decisions.
12. SDC should redefine its research funding instruments more clearly in terms of the different objectives of research policy and the different models of change.
13. SDC should introduce a budget line (or virtual budget) for research.
14. SDC should commit itself firmly to an explicit spending target for research.
15. Focus the portfolio more on areas of Swiss research competence.

Getting results

16. Systems for results-based management need strengthening in relation to research, and staff skills developed accordingly.
17. Monitoring and evaluation procedures should be more effectively linked to the models of change underlying each research activity. This should include tracking the intermediate outputs that are often assumed but not tested (such as tracking the subsequent career paths of people trained under capacity building programmes).
18. An effort needs to be made to establish impact monitoring for at least a sample of projects, by establishing baselines at the start of projects and monitoring change over the duration and after the closure of the project.
19. There is a need for a more strategic approach to deciding which research projects should be evaluated. Evaluations need to focus more on the quality of SDC management, and outcome and impact monitoring.
20. Work with other donors to develop best practice for impact assessment and the implementation of results based management in the research sector.

Research project and programme management

21. Information systems must be improved and better used to provide information that SDC research managers need, including locating research project documentation in a single electronic repository.
22. SDC needs to devote greater resources to research management either through additional staff or (competitively tendered) outsourcing.
23. The research desk needs greater resources, a clearer cross-cutting mandate and involvement of staff at a more senior level.
24. As part of the reorganisation process the thematic focal points need to be given a more explicit role in terms of initiating, funding and managing research.
25. As part of the reorganisation process COOFs need to be given a clear role in terms of initiating, funding and managing research.
26. Research funding needs to be progressively opened up on a more competitive basis and a more EU-wide basis.

Knowledge management

27. Research results need to be better communicated within and outside SDC.
28. SDC's thematic networks need to draw more effectively on knowledge held by the research community in Switzerland and elsewhere.
29. Research outputs need to be more accessible through SDC's knowledge management systems. This requires an improved searchable database providing access to research results and identifying where particular research skills are located.

30. A change in organisational culture is required to encourage staff to make greater use of research based knowledge in their operational work.
31. SDC should commission more research on policy and operational questions affecting SDC's own work.

The Broader Research System

32. SDC needs to work through coordinated partnership mechanisms to harmonise its support to research with other donors. This could include playing a leading role in the International Forum of Research Donors (IFORD) to be held in Switzerland in 2010.
33. SDC needs to consider how it might work more effectively with the private sector in developing countries in order to stimulate research and innovation.
34. SDC needs to consider how it can work more strategically with the private sector in Switzerland to stimulate private research on development issues, for example using innovative instruments, such as forward purchase agreements for new vaccines.
35. SDC needs to invest more in strengthening its relationships with its research co-funders (including more regular high level contact with SNSF, SER), and should more clearly articulate what it expects to contribute to and get out of each partnership.

Part 1 – Introduction

1. The purpose of this evaluation

This report is an external evaluation of SDC's research related activities that has been mandated by SDC's Board of Directors. It has been prepared by The Policy Practice, which has been commissioned by SDC's Corporate Controlling Section on the basis of a competitive procurement process.⁹ As stated in the Terms of Reference (see annex 1), "the purpose of the evaluation is to render accountability and to contribute towards improving SDC's future performance". Thus, the evaluation team have been requested to work towards two objectives:

- render accountability by evaluating past actions against the programme's original objectives, providing an evidence base to assess the strengths and weaknesses of the programme, and identifying lessons learned from SDC support to research.
 - contribute to improving SDC's future performance by identifying the critical research policy and management issues that will need to be addressed, presenting alternative options for change, and explaining their broader implications.
1. In relation to the second aim, this evaluation will not make firm recommendations on SDC's future research policy, but will seek to inform subsequent discussions within and outside SDC by providing an evidence base and drawing attention to the most critical issues.

The evaluation focuses on four sets of issues covering different aspects of the effectiveness of SDC's management of its research activities.

- *Policy*: Assessment of relevance and adequacy of SDC's strategies and policies.
 - *Portfolio*: Analysis of the composition of SDC's research, and assessment of its relevance to SDC's strategic goals.
 - *Results*: An assessment of research results against policy objectives in terms of relevance, quality, utilisation and research capacity building in developing and transition countries.
 - *Management*: Assessment of the quality of SDC's management of its research activities including the effectiveness of its institutional set up.
2. This evaluation focuses on SDC's performance in managing research funding. It does not provide an assessment of individual research projects and programmes funded by SDC. However, recipients of SDC funds and other interested parties have been consulted extensively, and have contributed to the evidence base. Examples of particular projects and programmes have been used to highlight general lessons affecting SDC's research activities as a whole.

⁹ In addition to the Core team Samantha Wade facilitated workshops with the Core Learning Partnerships. The developing country case studies were prepared by Shizu Upadhya (Nepal), Deograsias Mushi (Tanzania), Carlos de la Torre and Rebecca Clements (Peru)

2. The evaluation process

3. The evaluation began on 15 June 2009 and will finish in December 2009. The process has been guided by an Approach Paper prepared by SDC's Controlling Section, and is described in full in the evaluation team's inception report.¹⁰ The main stages and milestones in the process are also described there.
4. This evaluation has followed SDC's recently adopted model of establishing a Core Learning Partnership (CLP) to work closely with the evaluation team to discuss objectives, methodology and findings.¹¹ The CLP has played a key role at several stages of the evaluation process. First, during the inception mission the evaluation team met twice with the CLP to discuss the objectives and approach towards the evaluation. Second, the CLP took part in a visioning workshop on 8 October 2009 to discuss initial findings and key challenges emerging from the evaluation. Third, the CLP will comment on this and subsequent drafts of the consultants' report. Finally, the CLP will participate in a Synthesis/ Agreement at Completion Point workshop in early December to develop recommendations on the basis of the evaluation and take a stand on the implementation of the recommendations in the form of a formal Agreement at Completion Point (ACP). *Aides memoire* for each meeting with the CLP have been prepared by the evaluation team.
5. Interested parties within the development research community in Switzerland have been closely informed of the progress of this evaluation, and have been invited to two briefing sessions, once during the inception mission on 25 June 2009, and again on 11 November 2009 to discuss findings. *Aides memoire* have been prepared for these two meetings.
6. Throughout the process all parties have stressed the importance of undertaking an evaluation that is objective, evidence-based and independent. The consultants have appreciated the advice and guidance provided by the CLP and Corporate Controlling Section, but have reached their own conclusions independently of SDC.

¹⁰ See Annex 1. Evaluation of SDC's Research Related Activities Final Approach Paper, final version dated 23 July 2009 Inception Report - Evaluation of SDC's Research Related Activities, final version dated 15 July 2009 http://www.deza.admin.ch/en/Home/Activities/Evaluation/ressources/resource_en_183577.pdf

¹¹ The Core Learning Partnership was made up of seven staff from the Global Cooperation Department; including the Deputy Director, the Head of Policy Analysis Section, the head of the Knowledge Networking and Learning Section, and Programme Officers responsible for the research; six people from the Regional Cooperation Department, including the Deputy Head, the focal points for gender, and mountain development and other Programme Officers; and one Programme Officer from the Department for Eastern Europe and CIS

3. The scope of the evaluation

3.1 Boundaries of the evaluation

One of the problems faced by the evaluation team is that there is no universally accepted definition of research that can provide a hard and fast rule as to what is within the scope of the evaluation. By referring to 'research-related activities', the Terms of Reference for this evaluation recognise the reality that there is no clear delimitation of what constitutes research. The narrowest definitions describe only the creation of new knowledge, whereas broader interpretations would cover the application of existing knowledge in novel ways, building capacity and creating conditions for science, technology and innovation more generally.¹²

7. SDC's conception of 'research-related activities' tends towards the broader interpretation. The 2002 Research Policy does not offer a single definition of research, but distinguishes between three categories "results-oriented research", "capacity building" and "research partnerships" (page 7).¹³ There is a strong focus on applied and adaptive research, which is viewed as being a more appropriate use of ODA funds than "basic or strategic research" (page 4). The 2002 Research Policy commits SDC to supporting both knowledge generation, and creating the conditions to make appropriate use of the knowledge generated (page 4).
8. It is clear to the evaluation team that within this broad conception, there are important differences of opinion within SDC as to which types of research-related activity should be prioritised. A recurring theme in this report is that these different understandings and attitudes towards different types of research-related activities have been an obstacle to effective and focussed management. However, at the broadest level there is general agreement within SDC that science, technology and innovation, including the generation and application of knowledge, are critical drivers of development, and that SDC has an important role to play in supporting these processes.
9. These debates and definitional challenges pose practical problems from an evaluation perspective, where it is essential to establish the scope and boundaries of the study in order to ensure focussed and representative enquiry. SDC does not have a budget for research, and any project or programme may include some research or research-like activities. However, SDC does record its research investments in the ARAMIS database, which holds records of all research projects funded by federal departments. The inventory of 391 active and closed SDC projects held on the ARAMIS database provides a useful starting point and sampling frame for this evaluation.¹⁴ As discussed further in section 8 (portfolio analysis), there are shortcomings in the way that SDC has used the ARAMIS database and the classification scheme that has been applied, but the list of SDC funded research projects is largely complete, and covers all of the types of research described in the 2002 Research Paper without obvious omissions. While this lends the evaluation a broad focus, this is a suitable starting point given SDC's own conception of what constitutes research-related activities, and the need to think widely about supporting science, technology and innovation.

¹² Watkins, A. and Ehst, M. (2008) Science, Technology and Innovation, Capacity Building for Sustainable Growth and Poverty Reduction, World Bank, <http://go.worldbank.org/7MEIFPZWU1>

¹³ Swiss Agency for Development Cooperation (2002) Research Policy of the Swiss Agency for Development Cooperation http://www.sdc.admin.ch/ressources/resource_en_23780.pdf

¹⁴ The total of 391 active and closed SDC research projects was obtained from the ARAMIS database on 31 July 2009

10. This evaluation therefore covers SDC's research expenditures as recorded in the ARAMIS database. However, the scope of the evaluation is not restricted to this definition, and the team have sought to analyse in broad terms SDC's policies and management of research in all of the subject areas discussed in the 2002 Research Policy.

Having studied SDC's entries into the ARAMIS database the evaluation team has noted that it includes a few educational, training and consultancy/backstopping activities that do not fit with most definitions of research. The evaluation will not discuss these activities where they are not closely linked to a research activity, meaning the creation or utilisation of new knowledge.¹⁵ In practice, however, there is often much overlap because training and capacity building is very often provided as part of an individual or institution's participation in a particular research activity. This is especially the case with SDC, which has invested heavily in the model of North-South research partnerships.

This evaluation covers all SDC funding of research activities including support for research undertaken by multilateral organisations and SDC's bilateral research funding. The evaluation team understands that research contributions to multilateral organisations reflect Switzerland's commitment to working at the multilateral level, and has not raised questions about the basis or level of this support. However, the evaluation does raise questions about the coherence and management of research spending through multilateral programmes, and the extent to which such support creates potential and actual synergies with research spending through the bilateral programme and North-South partnership programmes. The focus of the investigative work and research used by the evaluation team has been on research spending through the bilateral programme.

3.2 Which objectives should SDC be assessed against?

As discussed in section 7 on the policy and conceptual framework, there are several documents describing SDC's research policy and objectives. While there have not been major shifts in SDC's policy over the past decade, there are several different points of reference, most importantly the 2002 Research Policy Paper and the two subsequent Research Master Plans (*Forschungskonzepte*).

In reviewing the various policy statements this evaluation has found that the 2002 Research Policy Paper provides the clearest and most concise statement of policy. Although this document does not have a formal legal status, it is still understood to be the most current and authoritative statement of SDC's objectives in supporting research. It states three major objectives.

- Generate specific results and improve effectiveness. This describes SDC's aim of supporting results-oriented research that is relevant to solving development problems. It also includes using research to improve SDC's own performance in policy and operational work.
- Contribute to sustainable institutional and individual capacity building in the South and East.
- To maintain or increase Swiss research capacity both at an institutional and individual level in fields related to and relevant for development.

¹⁵ The OECD Frascati Manual (3rd revision 2002) includes the following definition of research, which has also been followed in this report. "Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications" (page 13)

This evaluation finds that the objectives stated in the 2002 Research Policy accurately describe how the aims of SDC's research activities have been understood within the organisation.¹⁶ In particular, they emphasise elements of research *relevance*, *results* and *capacity building*. For the purpose of *rendering accountability* the evaluation will use the 2002 objectives as the basis to measure past and present performance.

For the purpose of contributing to improving SDC's future performance this evaluation will highlight certain objectives that reflect current best practice, but were not explicitly stated in the 2002 objectives. Most importantly this covers the utilisation of research results, and broader thinking about how SDC can contribute to promoting science, technology and innovation.

¹⁶ However, in the opinion of the evaluation team the clearest statement of SDC's research policy can be found in the 1993 Research Policy Paper (see paragraph 52). However, since this text is now 16 years old the evaluation team has taken the more current 2002 policy as the basis for this evaluation

4. The key questions

11. During the inception phase the evaluation discussed and agreed with the Core Learning Partnership the following key questions, which have been used to guide the evaluation.

A) The relevance of SDC's strategies, policies and research portfolio. This includes:

- What are the goals of SDC's research policy (including an analysis of the implied theory of change)?
- Consistency between different objectives of SDC research policy, including consistency with SDC's overall goals, Federal Bills, programmes of other Swiss research funders, Swiss Foreign Policy for Science, international donors?
- How can SDC complement Swiss science more generally and add value to it?
- Composition of the research portfolio (size, subject areas, instruments, institutions)?
- Does the portfolio reflect SDC's strategic priorities and Swiss comparative advantage?
- Relevance of the portfolio to SDC, developing country partners, developing countries more generally, and the global community?
- How does SDC's research policy and portfolio compare with other research donors?

B) Evidence of outcomes, including outcomes relating to:

- solving priority development problems in South and East.
- informing SDC actions.
- contribution of SDC funded research to global development knowledge.
- strengthening of autonomous research capacity in the South and East.
- promotion of development research in Switzerland.

C) SDC's management of research related activities. This will include an assessment of how well SDC manages:

- the selection of research projects and partners.
- procurement.
- ongoing monitoring of the portfolio.
- tracking of results, lesson learning, adjustment of portfolio.
- use of research results across SDC policy making and programming.

Furthermore, the evaluation will consider what lessons can be learned about how effectively research is managed within SDC's new organisational structure and processes, including the functioning of the new thematic networks in relation to the management of research and the role of the research desks located in the Analysis and Policy Section.

D) SDC's use of research outputs for more effective working:

- How can SDC arrive at a consensus on the value and purpose of funding research?
- How are research needs identified within SDC and fed into the research portfolio?
- How does SDC learn from the results of research?
- How does SDC use research results in its operational programmes?
- How could SDC use research results more effectively and what lessons can be learned from comparisons with other donors?

5. The evaluation methods

This evaluation employed seven research methods as described in table 1.

Table 1: The principal methods, sources and sampling strategies used in the evaluation

Research methods	Source and sample
1) Review of policy and legal documentation	Federal Acts, Ordinances and Botschaften concerning the South and East as well as research policy generally; key federal government and SDC policy documents (including the 2008-2011 Forschungskonzept, the 2002 SDC Research Policy document, the Swiss Strategy for the Promotion of Research in Developing Countries, and the directives for quality control in the research activities of the federal administration of 2005), and policy papers of other major research funders.
2) Key informant interviews in Switzerland	63 interviews covering SDC senior and middle management, SDC programme managers whose responsibilities cover the research activities, all major research centres in Switzerland receiving SDC funds, recipients of SDC funding in developing and transition countries (through the case study interviews), Swiss National Science Foundation and KFPE.
3) Questionnaire survey Annex 7	Three separate electronic questionnaires covering: (1) 101 SDC staff in headquarters and COOFs, (2) 57 researchers in Switzerland receiving SDC funds or funds from an SDC supported programme, and (3) 50 research partners in developing countries.
4) Portfolio analysis Annex 4	222 SDC funded projects recorded on ARAMIS that are currently active or have been active since January 2007.
5) Review of project documentation Annex 5	Credit Proposal, project documents, progress reviews and evaluations for 20 SDC research projects randomly selected from a stratified sample of the 222 SDC funded projects included in the portfolio analysis.
6) Review of existing evaluations of SDC research activities Annex 6	21 evaluations of SDC research projects completed since 2006 Meta evaluation of SDC Evaluation – Peter Arnold report SER Evaluation of Ressortforschung 2009
7) Case studies illustrating the working of different SDC research funding instruments Annex 8	14 case studies covering a representative sample of SDC research contributions and commissions focussed on the following countries: Nepal, Peru, Serbia, Tanzania and Switzerland.

5.1 Review of policy and legal documentation

12. The aims of the review of policy and legal documents were to: (a) clarify the legal basis of SDC's mandate in supporting research related activities; (b) survey the various non-legally binding documents stating policies and priorities for SDC funded research; (c) examine the coherence, relevance and guidance given by the present framework of regulations and policy statements; and (d) analyse the "models of change" implied in the various policy and legal documents and their validity.

5.2 Key informant interviews

13. As listed in annex 2, a wide range of key informants were interviewed within SDC (24) and the wider research community in Switzerland (39). Interviews with researchers in developing countries were carried out as part of the case study research and are detailed in the case study annexes. These interviews followed a semi-structured interview schedule and were adapted to the particular area of competence of the interviewee. In addition, the evaluation team held several workshop sessions with the Core Learning Partnership, including the visioning workshop on 8 October 2009 and the Synthesis /Agreement at Completion Point Workshop on 2-3 December 2009.

5.3 Questionnaire surveys

14. Three separate versions of an electronic questionnaire were prepared, pilot tested and distributed to: (a) SDC staff in headquarters and COOFs, (b) recipients of SDC funding (or participants in a SDC supported North-South programmes) in Switzerland, and (c) recipients of SDC funding in developing countries. The purpose of the questionnaires was to measure perceptions about the value, objectives, relevance and results of SDC funded research, obtain evidence of the quality of SDC's management of research activities, and to obtain views about the quality, equity and results of SDC funded research partnerships. The results of the questionnaire surveys, which received 208 responses, are presented in full in annex 7.

5.4 Portfolio analysis

15. From the beginning of the evaluation process it has been apparent that SDC does not have an adequate and accurate overview of the research activities it supports. While the ARAMIS database can be used to establish a basic inventory of projects, the data SDC has entered into the system suffer from coding deficiencies and inaccuracies that make it difficult to assess the relative importance of different instruments, countries and sectors in SDC's research portfolio. To enable more informed analysis the evaluation team has applied an additional classification scheme to the ARAMIS entries based on a reading of project documents to establish more carefully the type of recipient of the research funding, and the type of instrument used.

This analysis, written up in full in annex 4, has been used to address a number of important issues including:

- The relative importance of research spending through bilateral and multilateral channels.
- The share of research investment allocated to research organisations in Switzerland.
- The share of research funds spent in developing and transition countries.
- The extent to which research funding is earmarked for specific projects or provided as a core contribution to research organisations.
- The share of funding directed at the three different objectives presented in the 2002 Research Policy.

5.5 Review of project documentation

16. In order to assess the management of research projects and programmes by SDC the evaluation team undertook a detailed review of the documentation for a 10% random, stratified sample of SDC funded research projects. The purpose was to understand how the different projects have been selected, managed and monitored, and in particular to understand how procurement procedures and Results Based Management have been applied in practice. A complete writeup is provided in annex 5.

5.6 Review of existing evaluations of SDC research activities

17. A 'meta-evaluation' was carried out covering an initial population of 34 evaluations of research projects/programmes collated by SDC and provided to the evaluation team. The bulk of the evaluations were conducted in 2006 and 2007 prior to SDC's reorganisation, during which far fewer evaluations were conducted. An initial screening of these reports determined that only 21 fell within the scope of this evaluation, as defined in section 3.1. The other 13 evaluations mainly concerned backstopping, training and teaching activities, and were excluded from the analysis.

The meta-evaluation comprised an assessment of the quality of the evaluations and an analysis of their conclusions regarding the relevance and results of SDC funded research projects. A complete writeup is provided in annex 6.

5.7 Case studies

The final work stream examined fourteen cases of individual research projects illustrating how particular instruments and funding modalities work in practice.¹⁷ The selected sample of research projects was based on the initial choice of four countries, Tanzania, Nepal, Peru and Serbia. These were chosen to provide a regional spread, and to cover countries with a high intensity of SDC research activities. In addition, 3 case studies were selected from SDC research contributions and commissions made to Swiss-based institutions.

The case studies were then selected purposefully within these countries so as to illustrate: (a) the different types of funding modalities and instruments (research contributions vs. research commissions, direct SDC management vs. management as part of a larger research programme), (b) different types of recipients, and (c) different sectors and subject areas.

A local consultant in each country prepared short case studies of the individual research projects on the basis of an analysis of the documentation and key informant interviews. In the case of Serbia and the Swiss-based institutions, the case studies were conducted by members of the core team.

The case studies follow a template prepared by the team designed to generate illustrative material on the types of research activity supported by SDC, insights into the purpose of different instruments, lessons learned from successes and failures, and to understand the requirements on the part of SDC to manage these instruments well. A complete writeup is provided in annex 8.

¹⁷ Fifteen case studies had originally been selected, but one case study, Maroc: Electrification Décentralisée, was found to be unsuitable due to its very limited relevance to research

6. Context for the evaluation

18. The evaluation has taken place during a period of considerable change within SDC and the wider world. Many of the current changes within SDC have a direct effect on how research will be managed in the future, and there remains some uncertainty as to how particular roles in the organisation will evolve in relation to their responsibilities for research. The implications of these changes are addressed throughout this evaluation, but particularly in part 3 of the report.
19. In a general sense the recent past has demonstrated the speed with which new concerns arise, and the global nature of these concerns. In the past two years global concerns about fuel, food and finance have been added to an already long international agenda comprising *inter alia* the more long standing concerns of climate change, conflict and fragile states. SDC, along with other providers of support to research will have to plan in the context of this type of rapid change and uncertainty.
20. SDC faces a particularly uncertain future in relation to its support to research arising from the reorganisation of SDC itself, the implications of which are not yet fully clear, a changing domestic situation with other actors becoming involved, and changes to the nature of development assistance. Some of the main drivers of change are highlighted in the paragraphs that follow.

6.1 Reorganisation of SDC

21. SDC is currently undergoing a process of major change which started in mid-2008. In the first phase of the reform the Thematic Department (F Department) was abolished and thematic competencies were moved into the geographic divisions. Eleven thematic networks and a normative gender network have been established cutting across SDC's new structure, but with designated focal points housed within geographic divisions.¹⁸ The second phase of reform will involve the further devolution of authority and decentralisation of staff to Cooperation Offices. Both of these changes have important implications for research management that are discussed in depth in sections 10.7 and 11.4.

6.2 The domestic political context

22. While SDC has always been a division of the Federal Department of Foreign Affairs (FDFA), it is expected over the coming years that the two entities will work still more closely together. One particular implication of this is likely to be a greater emphasis on "Swiss-ness" in SDC's operations. This in turn may result in pressures to build more effectively on Swiss 'comparative advantage' in research.
23. SDC will also find itself in a rapidly changing domestic environment as more federal agencies turn their attention to countries of the south and east not as recipients of official development assistance, but as countries of opportunity for Switzerland or which will have significant influence on global issues. Thus, the federal government is increasingly stressing the importance, for Swiss competitiveness and growth in the coming years, of reinforcing the Swiss Foreign Policy for Science (*Wissenschaftsaussenpolitik*), which is described later in section 7.2.

¹⁸ There are currently 11 thematic networks housed in different geographical departments. Climate, Energy and Environment; Rural Development; Migration and Development; and Water operate with the Global Cooperation Domain. Employment and Income; Decentralisation; Disaster Mitigation; Health; Education; Conflict and Human Rights; Political Economy and Development are located in Regional Cooperation Domain. In the medium term the aim is to reduce the number of themes and networks to avoid dispersion

6.3 Changes to the development and research funding environment

24. SDC support to research takes place in a changing aid environment. Switzerland has joined most other suppliers of official development assistance in signing up to the OECD/DAC Paris declaration on Aid Effectiveness and subsequent Accra Agenda for Action. This advocates greater harmonisation between donors, closer alignment of donor policies with those of recipients, increasing use of recipient countries' own systems and a stronger focus on results based management. All of these elements of aid effectiveness can have a major impact on how SDC supports research, particularly in relation to joining research funding consortia, giving greater "voice" to southern partners, and demonstrating more effectively the results of its support to research.
25. The trend towards management systems based on outcomes rather than inputs, is also likely to become strengthened in the case of SDC supported research because of anticipated changes in the legal basis on which SDC operates. Interviewees within the SDC often emphasised that they expected upcoming *Botschaften* in the area of development cooperation and cooperation with the East to create stronger forms of accountability towards Parliament, including in the area of research cooperation.
26. SDC also faces a more complex situation in relation to Switzerland's participation in a number of EU funding arrangements (for instance, FP7, the Cohesion Fund, the European Research Areas and COST that supports cooperation among scientists and researchers across Europe). These can all provide research support for Swiss researchers to partner with researchers in the south or the east, which offers both the opportunity of synergy with SDC's programmes, along with the risk of greater funding complexity and policy confusion.

Part 2 – Evaluation

7. The policy and conceptual framework

27. This section provides a review of the main legal and policy statements relating to SDC's research activities. It also analyses the conceptual framework used by SDC for its research activities, including implied models of change.

7.1 Legal statements and directives applying to SDC

28. The most basic legal documents governing Swiss development cooperation are the *Federal Act on international development cooperation and humanitarian aid* of 19 March 1976 (SR 974.0), and the *Federal Act on cooperation with the East* of 2006 (SR 974.1).¹⁹ However, neither of these documents makes specific mention of research policy. The Federal Act of 1976 lists “technical cooperation” as one of the forms of Swiss development cooperation (Art.6 1a), and states that the focus should be on “transfer of knowledge and expertise” in order to improve the living conditions in the South, but contains no specific provisions on research policy. The Federal Act on Cooperation with the East also lists “technical cooperation” as one main policy instrument, without further specifying this type of collaboration (Art. 7a).
29. The Ordinance on international development cooperation and humanitarian assistance of 12 December 1977 (SR 974.01) includes one article on “research and education”, which stipulates that “SDC shall promote scientific research, university education and, more generally, education in the areas of development cooperation and humanitarian assistance”. The article also provides for the role of SECO in this area (Article 29). The Ordinance on strengthened cooperation with Eastern European States of 6 May 1992 (SR 974.11) regulates the respective roles of SDC and SECO in the various areas of cooperation, attributing the responsibility of financial and technical assistance in the area of education, science, and research to SDC (Annex of Ordinance). However, neither Ordinance sets out the specific objectives, instruments or principles of SDC's research policy.
30. Every four years the Federal Council submits to parliament a ‘South Dispatch’ (referred to as *Südbotschaft* in German and *Message sud* in French) explaining the latest priorities and orientation of Swiss development cooperation policy.²⁰ These documents contain general statements about SDC's research policy. The South Dispatch of 12 May 2003 (03.040) contains one section on SDC's cooperation with universities and other institutions of higher learning. It is stated that SDC “will promote the research and other scientific capacities of developing countries, and contribute to the creation, diffusion and application of basic knowledge which is useful for development.” The document also explains that SDC will promote the establishment of research partnerships between Swiss scientific institutions and scientific institutions in the south and east. The South Dispatch mentions SDC's collaboration in this area with SNSF, EPFL and the NCCR NS (p. 4201).
31. The most recent South Dispatch dates from 14 March 2008 (08.030). According to this document, SDC shall support Swiss research and educational institutions in order to promote knowledge which is relevant for development, and support joint research projects conducted by Swiss researchers and researchers from the South. The Dispatch specifically mentions the promotion of “centres of competence” at Swiss Universities that are specialised in development research. The objective, according to the Dispatch, is to

¹⁹ http://www.deza.admin.ch/en/Home/About_SDC/Legal_bases

²⁰ It should be noted that many of the legal texts are referred to using English titles based on the evaluation team's translation, and may not represent the official translation

generate development-relevant knowledge, as well as to strengthen research capacities in the South and of Swiss research institutions working on in development issues. Moreover, SDC shall mandate research institutions to analyse and improve the methods and processes of Swiss development assistance (p. 2997). The Dispatch also makes specific mention of international research partnerships in the areas of health and environmental sustainability.

32. The Dispatches covering cooperation with Central and Eastern Europe contain some elements on research cooperation. The *Federal Dispatch on the continuation of cooperation with Eastern European States and CIS of 15 December 2006 (06.099)* mentions that Switzerland is engaged in cooperation in the area of research. The *Federal Dispatch on the contribution of Switzerland to the alleviation of economic and social disparities in the enlarged European Union of 15 December 2006 (06.100)* defines science and research as SDC priority areas, with special emphasis on applied research and the development of centres of excellence. Measures favouring technology transfer and the application of research results are also mentioned, and scientific exchanges are described as a privileged tool. The activities also aim to improve the position of Swiss research as part of the relations with the new EU member states. Finally, the *Dispatch on the contribution of Switzerland in favour of Bulgaria and Romania in view of alleviating economic and social disparities in the enlarged European Union of 5 June 2009 (09.055)* mentions joint research programmes and institutional thematic partnerships.

The Federal Council's Dispatch on the Promotion of Education, Research and Innovation for the period 2008-2011 and the new Swiss Foreign Policy for Science

33. The federal government is increasingly stressing the importance of research and innovation for Swiss competitiveness and growth in the coming years. The *Federal Dispatch on the Promotion of Education, Research and Innovation for the period 2008-2011 (07.012)* developed by SER sets out the general policy for these sectors in Switzerland, and highlights important links to foreign policy.²¹ The document describes a new Swiss Foreign Policy for Science (*Wissenschaftsaussenpolitik*), which aims to establish closer co-operation with a selected group of emerging “scientific powers”, including China, India, Japan, Russia, South Africa, South Korea, Brazil and Chile. The main means of cooperation are: (a) bilateral research cooperation programmes developed in close cooperation with Swiss institutions of higher learning, the SNSF and CTI, (b) reinforcing the so-called “Swiss Houses” for scientific and technological exchanges (Swissnex), and (c) increasing the number of scientific and technological councillors at Swiss embassies. The basic principles of the bilateral cooperation programmes are: (a) scientific excellence; (b) the creation of long-term partnerships; and (c) equal contributions to research projects of both parties.
34. Among the countries mentioned in the Federal Dispatch on the Promotion of Education, research and Innovation four countries - China, India, Russia, and South Africa - are singled out for particularly close bilateral cooperation in the form of strategic partnerships. Each partnership is led on the Swiss side by a “leading house”, i.e. ETH Zurich (China), EPFL (India), University of Geneva (Russia), and University of Basel (South Africa). The particular subjects singled out for cooperation with these four countries are life sciences, micro-nanotechnologies, environmental sciences, IT and communication technology, materials sciences, physics, chemistry, social sciences and the humanities (languages, civilisations) and economics.
35. The Federal Council's Dispatch on Education Research and Innovation stresses “the complementarities of the activities of SER and SDC, with the latter supporting projects from the angle of development aid”. An interesting illustration of how SER and SDC

²¹ Botschaft 07.012 über die Förderung von Bildung, Forschung und Innovation in den Jahren 2008–2011, 24 Januar 2007, Sekretariat für Bildung und Forschung - <http://www.admin.ch/ch/d/ff/2007/1223.pdf>

priorities will be combined in the future will probably revolve around what the Dispatch calls “the Swiss research centres of Abidjan in Côte d'Ivoire (CSRS) and of Ifakara in Tanzania”. These two centres are of some importance to both the SER and SDC strategies.

7.3 Other Federal Directives

36. The *Directives for quality control in the research activities of the federal administration of 2005* is a document governing research management across the entire federal administration.²² It contains norms regarding strategic programming, transparent processing for contracting, input into ARAMIS, the publication of research results, reporting requirements, the publication of Master Plans and evaluation requirements.²³

7.4 SDC research policy and planning documents

37. In 1993 SDC together with the Swiss Academy for Natural Sciences, issued a *Swiss Strategy for the Promotion of Research in Developing Countries*.²⁴ This strategy set out three objectives for Swiss development-related research: (1) to promote the sustainability of indigenous research capacities in developing countries, (2) to improve the living conditions in developing countries, and (3) to contribute to the resolution of global problems and, at the same time, to strengthen research capacities in Switzerland.
38. The strategy includes the following measures: (a) the creation of research partnerships for joint work on major global problems; (b) coordination with similar efforts of other industrialised countries, the private sector as well as non-governmental and international organisations; (c) awareness raising in the Swiss scientific community about development-relevant research; and (d) improved information, coordination and concentration within the federal administration (p.9).
39. In 2002 SDC published a document entitled *Research Policy of the Swiss Agency for Development and Cooperation (SDC)* whose basic aim is to “describe the role of research in relation to SDC’s manifold activities in the field of development cooperation”.²⁵ The document sets out three main objectives of SDC’s research policy that set the basis for this evaluation and are described in paragraph 0. The document identifies three broad categories of research support: result-oriented research activities, capacity-building schemes, and research partnerships. Individual projects can be placed on a continuum ranging from purely results-oriented research to a mix of both, to pure capacity-building. Research partnerships, in turn, are regarded as a particularly valuable approach for combining both results-oriented and capacity-building research activities. The document provides specific guidelines for research partnerships, reproduced from

²² Qualitätssicherung in der Ressortforschung des Bundes, Richtlinien, 9 November 2005, jointly published by Eidgenössisches Departement des Innern EDI and Eidgenössisches Volkswirtschaftsdepartement EVD - http://www.ressortforschung.admin.ch/html/dokumentation/publikationen/richtlinien_gs-d.pdf

²³ The guidance for input into the ARAMIS database remains rather general: “the data is compiled by the offices that undertake or order research and development work and by other interested entities. The entities providing the project data are responsible for making sure that they are complete, exact and up-to-date.” Regarding the publication of results, the directives also note that “The references... necessary for accessing the results [of the research] as well as the raw data which are at the basis of these results are compiled at least in ARAMIS and are freely accessible”

²⁴ *Schweizerische Strategie zur Förderung der Forschung in Entwicklungsländern*, Juli 1993 (2. Auflage Januar 1997), Direktion für Entwicklung und Zusammenarbeit (DEZA) und die Schweizerische Akademie der Naturwissenschaften (SANW) http://www.kfpe.ch/download/strategy_d.pdf

²⁵ Swiss Agency for Development Cooperation (2002) *Research Policy of the Swiss Agency for Development Cooperation* http://www.sdc.admin.ch/ressources/resource_en_23780.pdf This document follows an earlier 1993 paper entitled *Research Policy of the Swiss Agency for Development and Cooperation (SDC)*, which describes similar objectives and instruments

the well-known 11 principles for research partnerships developed by KFPE in 1998.²⁶ The 2002 Research Policy also sets a spending target of “6% of the annual global SDC budget for R&D” (p.3).

40. Since 2004 SDC has issued a four-yearly Research Master Plan (*Forschungskonzept, Plan directeur de recherche*), which sets out the main priorities of its research policy. The most recent Plan covers the period 2008-2011. For the 2008-2011 period, the Plan establishes the following six guiding principles for SDC’s research-related activities:

- *concentration* on areas where Switzerland has acquired specific expertise and an international reputation. This includes, for example, the pharmaceutical and bio-tech sectors, sustainable agriculture, the development of mountain regions, and issues related to federalism.
- *focus on long-term engagements*, that is on partnerships with institutions with which Switzerland has a long-standing relationship.
- *capacity-building*: research should not only be results-oriented, but also contribute to capacity-building in the target country.
- *practical utility*, including the broad diffusion of research results in order to enhance the impact of research on development.
- *partnership*: research partnerships between Swiss institutions and institutions in developing and transition countries are regarded as a particularly effective instrument for both institutional and individual capacity-building.
- *demand-orientation*: development research should be driven by the needs and priorities of developing and transition countries.

41. The Master Plan defines the following “thematic priorities” for the period 2008-2011:

- *Social development: health, water, social services and education*. This should include in particular projects in the fields of reproductive health, infectious diseases, access to health care systems, the “scaling up” of health care systems, (re)emerging diseases, chronic non-infectious diseases, global water research, and improvement of education systems in developing and transition countries.
- *Economy and employment*. Under this heading SDC activity should focus on professional training, development of the financial sector, and development of the private sector.
- *Agriculture, rural development and environment*, the focus should be on the sustainable strengthening of systems of agricultural production and commercialisation; the strengthening of research on political decision-making regarding the conservation of natural resources; enhancing ecological aspects of agriculture and forestry; and support to research on environmental risks.
- *Global partnership, development and commerce*. In this context, Switzerland shall take part and contribute to research programmes within the framework of EADI, ECDPM and DAC/OCDE.
- *Governance, rule of law and democracy*, where the focus should in particular be on decentralisation, social movements, participatory processes, and local autonomy in transition countries.
- *Conflict prevention and transformation and migration* includes research on risks of state failure, peace-related work, migration issues, as well as the role of business in peace-building.
- *Gender equality*, where the document mentions in particular the themes of “care economy” as well as gender equality and governance.

42. The Master Plan also lays out the roles of other Swiss institutions active in the area of research policy, and their relationship to SDC.

²⁶ Guidelines for Research in Partnership with Developing Countries, 11 Principles, Commission for Research Partnership with Developing Countries, KFPE, 1998 - http://www.kfpe.ch/download/Guidelines_e.pdf

7.5 Assessment of strengths and weaknesses of the present legal, regulatory and policy framework

43. The laws and ordinances reviewed in section 7.1 set the long-term regulatory environment for SDC's research activities, and have the character of a framework regulation. Basically, they give the SDC permission to encourage research as part of its activities, but allow considerable latitude in determining research policies and budget allocation. There is a trend towards rather more prescriptive regulation, with the latest South Dispatch offering more specific guidance than the previous one, in particular in relation to Swiss interests and role in development research. It is likely that this trend will be reinforced in the future, and the next Dispatches will include specific accountability frameworks against which SDC must demonstrate the effective and efficient use of resources (see section 6).
44. The Swiss Foreign Policy for Science described in the Federal Council's Dispatch on the Promotion of Education, Research and Innovation for the period 2008-2011 (section 7.2) has important implications for SDC, as it includes countries where SDC is already active in supporting research. While it is intended that SER and SDC will perform complementary roles in implementing this policy, there is a danger of overlap and incoherence. The Swiss Foreign Policy for Science is more strongly linked to gaining technological advantage for Switzerland, whereas SDC's actions are more closely related to capacity building and development in recipient countries. While such aims may not necessarily be contradictory, it has not yet been fully established what are the precise roles of the different federal departments, and how they will work together to build synergies.²⁷
45. The policy and strategy documents reviewed in 7.4 are non-legally binding texts, but offer much more substantial policy guidance than the laws and ordinances. The documents are generally well prepared, well reasoned and coherent, offering sound guidance and good practice. However, in the view of the evaluation team there is an excess of policy statements, leading to a sense of confusion about the policy weight of each document. For example, it is not clear whether the Research Master Plans take precedence over the 2002 Research Policy.²⁸ In contrast to the panoply of policy statements, there is a lack of an overarching statement providing clear guidance on *how to* translate policy into practice, and how at a technical level to ensure that SDC's numerous policy intentions are realised.
46. SDC's 2008-2011 Research Plan is by far the most detailed document regarding SDC's research-related activities. At the same time, it is in many parts a non-technical "public consumption" document (with examples of success stories, etc.). While this provides a useful statement of policy, the evaluation team is not convinced that the Research Master Plan is yet providing a meaningful opportunity for strategic reflection about how SDC proposes to address future challenges. There is a sense that the Master Plan has been elaborated as an ex-post justification of what is already being undertaken in terms of research. For the most part it stresses policy continuity, and offers relatively little guidance on what SDC may need to do differently, or do better, and how it should adapt to the changing context. Because it was written before SDC's recent reorganisation, the Master Plan does not take account of the implications of the restructuring of SDC's thematic competences.

²⁷ Currently a Swiss strategy for bilateral cooperation in the domain education, research and innovation is being drafted by an interdepartmental working group under the lead of the State Secretariat for Education and Science

²⁸ Moreover, it is unclear whether the 2002 *Research Policy of the Swiss Agency for Development and Cooperation (SDC)* supersedes that of 1993, which is at times still referred to in various policy documents

47. Another weakness of existing policy documents is that they are not based on a clear conceptual framework linking “research” to the strategic goals of SDC, and explaining how investment in research leads to development. While it is clear that many in SDC have thought deeply about these issues, this tends to remain a matter of varying personal conviction, and there appears to be no common institutional view. The linkages between research and development are not made explicit, are often assumed, and are not clearly explained. In the absence of a strong conceptual framework there is a tendency to treat research as a marginal activity for SDC rather than a central part of its strategy to achieve its development goals.
48. In the light of the above discussion there is a need for SDC to establish clearer and more explicit ‘models of change’ for research, explaining SDC’s conception of how a particular input (research investment) is translated into outcomes (development benefit) through various intermediate processes. The evaluation team’s assessment of the SDC’s model of change is provided in Box 1. This suggests that in relation to its research investment SDC is drawing on at least five different models of change, but these are not, as a rule, made explicit, and many important linkages are poorly understood. In practical terms, this means that SDC risks not paying sufficient attention to critical linkages that will determine whether or not research investment leads to its expected results.²⁹
49. The lack of clarity on ‘models of change’ makes it difficult for SDC to distinguish clearly and develop the instruments it uses to pursue different purposes. For example, there is a very different logic to funding research as a global public good to funding investment in research capacity building. SDC lacks differentiated funding instruments that reflect these different logics and are tailored to working with their distinct models of change.

²⁹ For example many donor funded investment in research have been undermined due to limited adoption of the resulting technology. Greater attention to the links between scientific discovery and widespread adoption would have help to design more effective programmes

Box 1 - SDC's 'model(s) of change' for research

'Models of change' provide the analytical foundations of any framework for Monitoring and Evaluation, and are a central idea in the OECD-promoted Management for Development Results (MfDR), which most donors have endorsed under the Paris Declaration on Aid Effectiveness. In this view attempts to evaluate the impact of particular interventions require assumptions to be made about how the various inputs - which could be expenditure or staff time - translate into outputs, outcomes and impact. This is known as the assumed "results chain". Such a model or "theory of change" can enable the identification of indicators at different points in the results chain to trace which activities are being effective in which ways.

The current emphasis on models of change is relatively new in its application to research. It is therefore probably unrealistic to expect to find explicit and well elaborated models of change in SDC documentation. However, in reviewing the regulatory and policy framework for SDC's research, it is possible to discern the contours of several, seemingly linear, models of change. However, not all of the steps are spelled out clearly, and certain deductions (shown in square brackets) have to be made to complete the results chain:

Model (A)	Knowledge generation → [knowledge dissemination] → [policy change and/or technical change in south/east] → developmental change
Model (B):	Increased <i>individual</i> research capacity in south/east → [increased research on relevant development-related issues] → [knowledge generation] → [knowledge dissemination] → [policy change and/or technical change] → developmental change
Model (C):	Increased <i>institutional</i> research capacity in south/east → [increased research on relevant development-related issues] → [knowledge generation] → [knowledge dissemination] → [policy change and/or technical change] → developmental change
Model (D):	Research aiming to improve SDC's interventions → [knowledge dissemination throughout relevant units within SDC] → SDC policy/programme change → increased aid effectiveness → developmental change
Model (E):	Increased Swiss research capacity on development-related issues → [knowledge generation] → [knowledge dissemination] → [policy change and/or technical change in south/east] → developmental change

50. More generally, SDC's research policy documents do not give sufficient attention to broader systems of innovation. There is a tendency to assume that investment in research will necessarily generate results, and to downplay the importance of the wider range of interventions that are required to create the right context and incentives for innovation to occur and to be sustained. The issues have been widely discussed in the innovations systems literature, but presently are not sufficiently reflected in SDC's policy documentation.

These shortcomings notwithstanding, the evaluation team finds that SDC's policy intentions for research are generally sound. There is a high level of consistency between the various documents, which have several recurring features, including the emphasis given to applied, adaptive and interdisciplinary research, ensuring development relevance and impact, strengthening research capacities in the south and east, furthering development research in Switzerland, and supporting research partnerships. These principles are well understood in SDC, and represent a coherent approach to supporting development research that can readily be identified as SDC's approach to supporting research.

8. Portfolio analysis

51. This section provides a profile of SDC's research spending, and analyses where in practice SDC is concentrating its resources. It addresses the following questions:

- How much does SDC spend on research?
- What are the different categories of research funding provided by SDC?
- Who are the main recipients of SDC funds, and where are they located? How much of SDC's research funding remains in Switzerland? How much of SDC's research funding is spent in developing and transition countries?
- Which research topics receive the largest funding allocations? Are these relevant to priority development themes? Are they consistent with areas of Swiss competence and the core thematic competences of SDC?
- What instruments does SDC use to support research? Are these consistent with SDC's strategy and objectives?
- What is the level of financial dependency of research institutions in Switzerland on SDC funding?
- Has SDC funding?
- To what extent do political pressures influence the allocation of research funding? acted to 'lever in' additional resources for development research?
- What are the strengths and weaknesses of the ARAMIS database, and how effectively has SDC used this system?

8.1 Estimate of total spending on research

52. An estimate of SDC's total spending on research can be obtained from the ARAMIS database, which records annual payments against each project code. These figures must be adjusted according to the estimated research content of each project programme, which may be 100% in the case of projects that are exclusively concerned with research activities, or much lower where the project only includes a small element of research among other activities. On the basis of this calculation, SDC spent CHF 42.8 million on research and research-related activities in 2008, a slight increase from 2007 (CHF 42.2 million).

53. These figures are somewhat lower than SDC's estimates of its research investment, which suggest research investment of CHF 51 million in 2007 (CHF 48.9 million in 2008).³⁰ These estimates are based on official guidelines set by federal administration that research mandates should be counted as 100% research regardless of the estimate of research content recorded on ARAMIS. The evaluation team accepts that this is the official practice for reporting purposes, but finds that the figures generated this way give a distorted view of SDC's research expenditure that grossly exaggerate the importance of numerous mandates which have a low research content. Hence, the figures presented in this evaluation will be based on the estimated research content as recorded on ARAMIS for both mandates and contributions.

³⁰ The official estimate of CHF 51 million annual research investment reported by SDC is based on a calculation conforming to the definition used by the federal administration. This states that all research mandates should be treated as if they had a 100% research content. For research contributions the value of the research activity should be adjusted according to the estimate of research content as recorded on ARAMIS

Box 2 – Shortcomings in SDC's use of the ARAMIS database as an analytical and management tool

As noted in a recent self-evaluation of research spending by federal authorities "the goals of ARAMIS are, (1) to provide interested persons with information about research and evaluations of the Federal administration (transparency), (2) ascertain that there is no duplication of research within the Federal administration, and (3) give the Federal authorities a simple tool to manage research projects (management instrument)."¹ From the perspective of SDC, the ARAMIS database has been somewhat useful in relation to the first two goals, but has not been used well as a management tool.

Having worked extensively with SDC's entries into the ARAMIS database, the evaluation team has noted the following shortcomings.¹ Most of these relate to the way that SDC has used the database, coded and entered information, rather than the architecture and technical features of the database itself, which are quite flexible and robust.

- No definition of research is provided by ARAMIS, which makes it difficult for users to decide which projects to include in the database, and to provide meaningful and comparable data on the research content of individual projects and programmes.
- The codes used by SDC to describe the type of research are rudimentary and not useful from a management or strategic perspective (99% of SDC projects are coded as 'applied research' for example). ARAMIS enables users to create new category codes (e.g. by theme, instrument etc.), and while SDC has experimented with these, it has not yet developed its own customised coding scheme.
- There are numerous errors in the coding of the thematic and country focus of individual projects and programmes, as well as the type of recipient. This makes it impossible to analyse the composition of the portfolio by subject, geographical area and recipient type on the basis of ARAMIS data alone. Substantial recoding had to be carried out for the purpose of the analysis in this evaluation.
- The ARAMIS database contains no information on individual research activities undertaken as part of a large research programmes, such as the NCCR North-South Programme. This reduces the usefulness of ARAMIS as a search tool to avoid duplication and to locate researchers interested in similar themes.
- Project descriptions are unstructured and vary widely in content and length. Much greater detail is warranted.
- Under a number of entries, keywords are in a mix of English and one (or several) Swiss official languages, which makes searches difficult. Organisation names are entered in one language only, and if recorded in, say, Italian, will not be found when searching for the English name. In general terms the search features available on ARAMIS are fairly limited.
- SDC has taken a decision not to include names and contact information for researchers, and only includes itself as a contact point. This limits the usefulness of the database to the research community as a networking tool..

In spite of these shortcomings the evaluation has found the ARAMIS database to be a valuable asset, in particular because it provides a more or less complete inventory of SDC's research related activities. However, in order to meet the full potential of ARAMIS, SDC will need to use the system more effectively.

54. Estimates of SDC's research spending are highly influenced by judgements regarding the research content of individual projects and programmes. One of the many limitations of SDC's use of the ARAMIS database (described in box 2) is that it is not based on a standard definition of research. The figures on research content entered into ARAMIS reflect the judgement of individuals and their different perception of what constitutes research. As part of the examination of project documentation for the sample of 22 SDC projects (see Annex 5) the evaluation team reviewed the estimates of the research content of each project as recorded on ARAMIS. The estimates were revised according to the widely used (but somewhat restrictive) definition of research provided in the Frascati manual.³¹ It was clear that in several cases the ARAMIS estimates of research content were much higher than the team's own estimates based on of the Frascati definition: in contrast, underestimates were rare. For the sample of 22 projects, the ARAMIS estimates appeared to be exaggerated by an average of 25%. Assuming that this is representative of the portfolio as a whole, it is therefore estimated that SDC spends around CHF 33 million according to the Frascati definition of research. For the purposes of the analysis that follows the evaluation uses the unadjusted figures on research spending, which total CHF 42-43 million per year. However, it must be recognised this is likely to be an overestimate.
55. SDC's annual research spending of CHF 42-43 million is equivalent to around 2% of total Swiss ODA, or 3% of spending by SDC. This finding is significant in the light of SDC's 2002 commitment to spend 6% of its budget on research and development (see paragraph 39). In this respect SDC appears to be falling well short of the target mentioned in its research policy.
56. SDC's spending on research can be compared with other development agencies, although there are major data deficiencies. One attempt to rank donors' support to research (mainly using 2006 data) places SDC in 16th place, with approximately the same budget as the Dutch, the Danes and Rockefeller Foundation and about one tenth of the largest funder, the Gates Foundation (see Box 3). In terms of the share of its total budget spent on research SDC also appears to be a fairly average donor. On the basis of the research spending figures reported in box 3, SIDA appears to be spending around 5.5% of its budget on research, DFID (UK) 4%, USAID 3%, SDC 3%, European Commission 2.5%, BMZ (Germany) 2.3% and Danida 1.8%.

The evaluation team has not prepared estimates of SDC research expenditure prior to 2007. However, the perception of researchers in Switzerland, as indicated by the questionnaire responses, suggests that the level of SDC research funding has not changed substantially over the past decade (see Annex 7, table 39).³²

³¹ The OECD Frascati Manual (3rd revision 2002) provides the following widely used definition of research: "Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications" (page 13). Note that this definition is somewhat restrictive and does not include research capacity building, which is commonly considered within SDC to constitute a research related activity. In reviewing the research content estimates on the ARAMIS database the evaluation team included the research capacity building activities that were linked to research projects. In practice this covered most of SDC's investment in research capacity building, which is usually carried out as part of a defined research project or partnership

³² Respondents were asked whether over the past ten years they had noticed any change in SDC's interest in supporting development research. The largest group of respondents indicated that there had been no change. While some respondents stated that interest had fallen, a more or less equal number pointed to the opposite trend

Box 3 – How does SDC's research spending compare with other development agencies

In terms of volumes of aid allocated to research, the data are often weak and are generally not believed not be fully comparable. There are differences between donors who include research-like activities that are commissioned by the donor, and those who do not. Similarly some donors account for building research capacity, while others exclude this category.

Expenditure is also likely to be a poor indicator of the volume and quality of "research" produced given the huge variation in the cost of employing researchers in different countries, and the extent to which researchers' overheads and other costs are covered by other sources of funds.

Despite the caveats attempts have been made to rank donors' support to research. One recent attempt using data mainly from 2006 places SDC at 16th place, with approximately the same budget as the Dutch, the Danes and Rockefeller Foundation, and about one tenth of the Gates Foundation (the largest funder).

	Agency (Country)	Annual Spending on Development Research/ US\$ millions <i>with reference year(s)</i>
1	Gates Foundation (USA)	450 (2006)
2	USAID (USA)	282 (2002)
3	European Union	254 (2007-08)
4	IRD (France)	220 (2005)
5	DFID (UK)	174 (2005), 300 (2008)
6	Wellcome Trust (UK)	143 (2005-06)
7	SIDA (Sweden)	135 (2006), 131 (2008)
8	Medical Research Council (UK)	120-160 (2006)
9	IDRC (Canada)	110 (2006), 139 (2008/9)
10	World Bank	>100 (2005)
11	NORAD (Norway)	100 (2005)
12	ACIAR (Australia)	85 (2006-07)
13	Ford Foundation (USA)	75-100 (2006)
14	BMZ (Germany)	78 (2006)
15	CIDA (Canada)	65 (2006), 34 (2008-9)
16	SDC (Switzerland)	40 (2006), 44.4 (2008)
17	Japan	>35 (2005-06)
18	DMFA (Netherlands)	>35 (2006)
19	Danida (Denmark)	35 (2005)
20	Rockefeller (USA)	30-40 (2005)

Source: Setting The Scene: Situating DFID's Research Funding Policy and Practice in an International Comparative Perspective A scoping study commissioned by DFID Central Research Department. By Nicola Jones, John Young and Mark Bailey, Overseas Development Institute, London, June 30 2007

8.2 Categories of research spending within the research portfolio

57. Before beginning the analysis, it is necessary to define the main categories of research spending within the research portfolio. For the purposes of this evaluation the *research portfolio* is defined as all SDC projects and programmes that have been entered into the ARAMIS database. In practice the term research portfolio is rarely used within SDC because there is no identifiable budget for research and no single research management structure. However, the term will be used in this evaluation because it is convenient and analytically useful.

58. The basic categories of SDC research funding can be distinguished on the basis of *mode of funding* (research contributions and research mandates), the distinction between *project and programme financing*, and the *type of recipient* (for example, multilateral organisation, regional organisation, university, NGO, or joint North-South research partnerships). These categories are explained more fully in the following paragraphs.
59. **Mode of funding.** A *research contribution (Beitrag)* is a payment to an organisation undertaking research work that is intended to support its general budget (i.e. a core contribution) and programmes. A *research mandate (Auftrag)* is a payment to an organisation that is intended to cover the cost of a commissioned research activity aimed at producing a specific knowledge output. Both modes of funding are subject to a Credit Agreement, contract and reporting, monitoring and evaluation requirements. However, SDC exercises closer oversight and management control over mandates.
60. **Project and programme financing.** Whereas *project financing* is provided in support of a single and defined set of activities, *programme financing* is used to fund multiple research projects oriented towards a common theme or objective. The usual model for programme financing is that of a research fund managed by a contracted agency or partner to SDC. Individual applicants may apply to the fund on the basis of a competitive call for proposals, and grants are awarded on the basis of an assessment of applications by an expert panel on the basis of clear selection criteria.
61. **Type of recipient.** This analysis distinguishes between four main categories of recipient of research funds.
- *Multilateral organisations* are defined in the South Dispatch as members of the UN system, Bretton Woods Institutions, Regional Development Banks, OECD, EU, CGIAR, GFATM and several other organisations with an intergovernmental character.³³
 - *Other organisations with international membership* include global and regional research networks, foundations and NGOs that are not intergovernmental and are not defined as multilateral organisations in the South Dispatch.
 - *Nationally based organisations* are research organisations that are clearly identified with a particular country (even though they usually undertake research projects internationally), for example universities, research institutes and NGOs with a clear national base. This category has in the following analysis been subdivided into Swiss based institutions, other European and North American organisations, and organisations based in developing and transition countries.
 - *North-South (or West-East) programmes* are research partnership programmes linking researchers in Switzerland to counterparts in developing or transition countries. These programmes are usually cofunded with SDC meeting the costs of the research partner in the developing or transition countries, and Swiss universities or the Swiss National Science Foundation covering the costs of Swiss researchers. The following SDC funded programmes considered to be North-South (or West-East) programmes include: (1) NCCR North-South, (2) SDC-SNSF Research Partnerships with Developing Countries, (3) Research Fellowship Partnership Programme of ETHZ North-South Centre, (4) Fonds de coopération scientifique EPFL-DDC, (5) Support to the Research Partnerships of the Swiss Universities of Applied Sciences, (6) SCOPES Scientific Co-operation between Eastern Europe and Switzerland, (7) ESTROM Romania, (8) *Jeunes chercheurs*, and (9) *Echanges universitaires*.

³³ Botschaft über die Weiterführung der technischen Zusammenarbeit und der Finanzhilfe zugunsten von Entwicklungsländern, vom 14. März 2008, see pages 2992-2996 for an explanation of how SDC defines 'multilateral support'

8.3 Breakdown of research spending by recipient

62. Using the ARAMIS database SDC records the name of the recipient and their basic type (e.g. NGO, university, international organisation). However, this does not include the categories described in paragraph 61, which are particularly relevant to policy questions addressed by this evaluation. To enable such a categorisation the evaluation team added additional recipient codes to each ARAMIS entry based on an assessment of the characteristics of the named recipient (see Annex 4 for further details). The results of this analysis are shown in table 2.

Table 2 – Recipients of SDC research funding 2007-2008

	number of projects receiving funds in 2008	Payments in 2007 CHF '000s	Payments in 2008 CHF '000s	% of total (2007-2008 combined)
Multilateral organisations	29	15,385	11,990	32.2%
- of which CGIAR centres	24	15,044	11,286	31.0%
Other organisations with international membership	30	5,918	6,458	14.6%
- of which regionally based organisations (mainly southern)	22	5,136	5,725	12.8%
Nationally based organisations	86	14,210	17,836	37.7%
- Switzerland-based organisations	56	7,632	11,229	22.2%
- other European or North American organisations	8	1,642	1,178	3.3%
- organisations based in developing or transition countries	22	4,936	5,429	12.2%
North-South programmes	14	6,716	6,473	15.5%
Total	159	42,231	42,758	100%

Note that these figures are based on the research content estimates reported in the ARAMIS database. They have not been modified by the adjustment factor discussed in paragraph 69.

63. **Multilateral funding.** The table indicates that research contributions to multilateral organisations make up nearly a third of SDC's research spending. Nearly all of this is provided to the Consultative Group for International Agricultural Research (CGIAR). A total of 24 projects with CGIAR involvement were funded by SDC in 2008.

This includes core funding to the CGIAR system and institutional funding to CGIAR research centres for a sum of CHF 12 million per year; and allocations to specific projects managed by the CGIAR centres.

Outside of the CGIAR there are a few multilateral research contributions recorded on ARAMIS, mainly directed at the World Bank and OECD Development Centre.³⁴

64. **Funding of research activities in Switzerland.** Table 3 can also be used to answer the important question of how much of SDC's research funding is spent on organisations based in Switzerland. The proportion of SDC research spending directly allocated to Switzerland-based organisations is around 22%. In addition to this, organisations in Switzerland will also receive a modest benefit from SDC's funding of North-South programmes. While, the general rule is that SDC's contribution to North-South programmes is used to fund the Southern or Eastern partner, there are a few exceptions described in Annex 4. This analysis assumes that not more than 20% of SDC's total contribution to North-South programmes enters the accounts of research organisations in Switzerland. Thus the amount of SDC research funding received by organisations in Switzerland is estimated to be around 25% of total SDC research spending.
65. Annex 4 provides a detailed breakdown of how research funding for organisations based in Switzerland is allocated between the different organisations. Four federal and cantonal universities receive the bulk of the funding (EPFL, ETHZ, University of Fribourg, University of Bern). Specialised research institutes with federal and cantonal funding (IHEID, STI) also receive significant SDC funding. NGOs and foundations based in Switzerland are also important beneficiaries.
66. It is important to note that Swiss based research institutions usually receive other SDC funding in addition to research funds recorded on ARAMIS. In most cases these other sources of SDC funds are more important than SDC research funds. Analysis of payments as recorded on the SAP system for the six main university recipients listed in table 2 (Universities of Fribourg and Bern, ETHZ, EPFL, IHEID and STI) showed that for the years 2007 and 2008 SDC research funds (as recorded on ARAMIS) made up only 26% of total SDC transfers to these institutions. The bulk of SDC funding was for the implementation of development and training projects, which were not considered to include a research element, and to a lesser extent for the execution of SDC backstopping mandates.
67. The finding that a quarter of SDC's research spending is directed at organisations in Switzerland will no doubt provoke debate as to whether this is an appropriate level of support. There is an understandable concern that SDC should not be using its funds, classified as Official Development Assistance (ODA), to support Swiss organisations. However, this analysis shows that SDC's spending on research activities in Switzerland is rather limited, around CHF 10 million per year, or 0.5% of ODA. The remaining three quarters of SDC's research resources are spent outside Switzerland. In this respect SDC's spending on research appears to be somewhat less Switzerland-based than Swiss ODA as a whole.³⁵
68. As indicated by the key informant interviews and the questionnaire findings (see Annex 7, table 15) there is a commonly (but not universally) held perception within SDC that too much of its research funding remains in Switzerland. However, based on the evidence presented here the evaluation team finds that the level of SDC funding for research

³⁴ It is important to note that SDC is certainly funding more multilateral research activities than are recorded on the ARAMIS database. Most of the large multilateral organisations operate research programmes, and Swiss contributions to these organisations will automatically finance such research. However, it is impossible to establish the extent to which these core contributions are used for research, and for this reason such contributions are not reported on ARAMIS. The ARAMIS data therefore gives a rather distorted impression that SDC is only supporting CGIAR research and not other research programmes undertaken by multilateral organisations. This is not the case, but it remains an established fact that CGIAR contributions are sizeable, and that the CGIAR is the by far the largest recipient of SDC research funds

³⁵ A researcher on the IHEID /IRENE Economic Effects of Aid Study indicated that as much as 50% of Swiss ODA is spent directly on goods and services in Switzerland

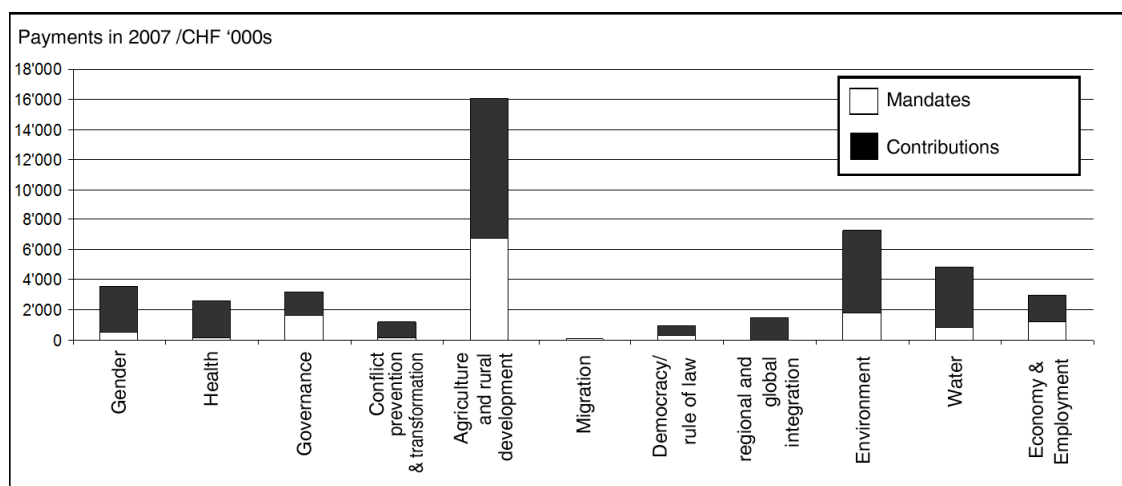
activities in Switzerland is not excessive.³⁶ Comparable figures for other development agencies are not available, but the evaluation team's sense of how other bilateral research donors operate does not suggest that SDC is abnormal in directing around a quarter of its research funds to domestic institutions.

69. **Funding of research activities in the South and East.** The figures reported in table 3 indicate that the majority of SDC's research spending is directed at the South and East. In addition to the 12.2% of research funding spent on nationally based research organisations in the South and East, SDC is also providing substantial support to CGIAR centres (mainly Southern based), regional research organisations (mainly Southern and Eastern based), and North-South programmes where SDC's resources are directed at the Southern or Eastern research partner. Taking these items together SDC appears to be spending around two-thirds of its research funds in the South and East.
70. **Funding of other European research centres outside of Switzerland.** Funding of EU and North American research centres amounts to only 3.3% of SDC's total research investment research funding, and most of these funds have been awarded to a few UK research institutions. Taking a European perspective of SDC's research funding, there is a clear and heavy preference towards Switzerland. There is, however, clearly an interest within SDC to engage more in research at the European level, as exemplified in SDC's participation in the two European Research Areas (agriculture and water).

8.4 Allocation of the funding by research discipline and subject areas

71. Figure 1 shows the sectoral and thematic breakdown of the portfolio. This is reproduced from an overview document recently prepared by SDC that includes a more accurate sectoral categorisation than can be derived from SDC's entries into the ARAMIS database.

Figure 1 – Sectoral and thematic breakdown of SDC research funding 2007



Source: Forschungsinvestitionen der DEZA: ein Überblick, Working Paper, Policy and Analysis Section, June 2009.

72. Agriculture and rural development is the main sectoral focus of SDC's research spending. For the most part this reflects the large multilateral contribution to the CGIAR agricultural research system. The second and third most important sectors for SDC research funding are environment and water.

³⁶ This concurs with the perception of researchers in Switzerland whose questionnaire responses indicate general agreement with the statement that "the balance of expenditure between Switzerland and developing and transition countries is correct" (Annex 4, table 41)

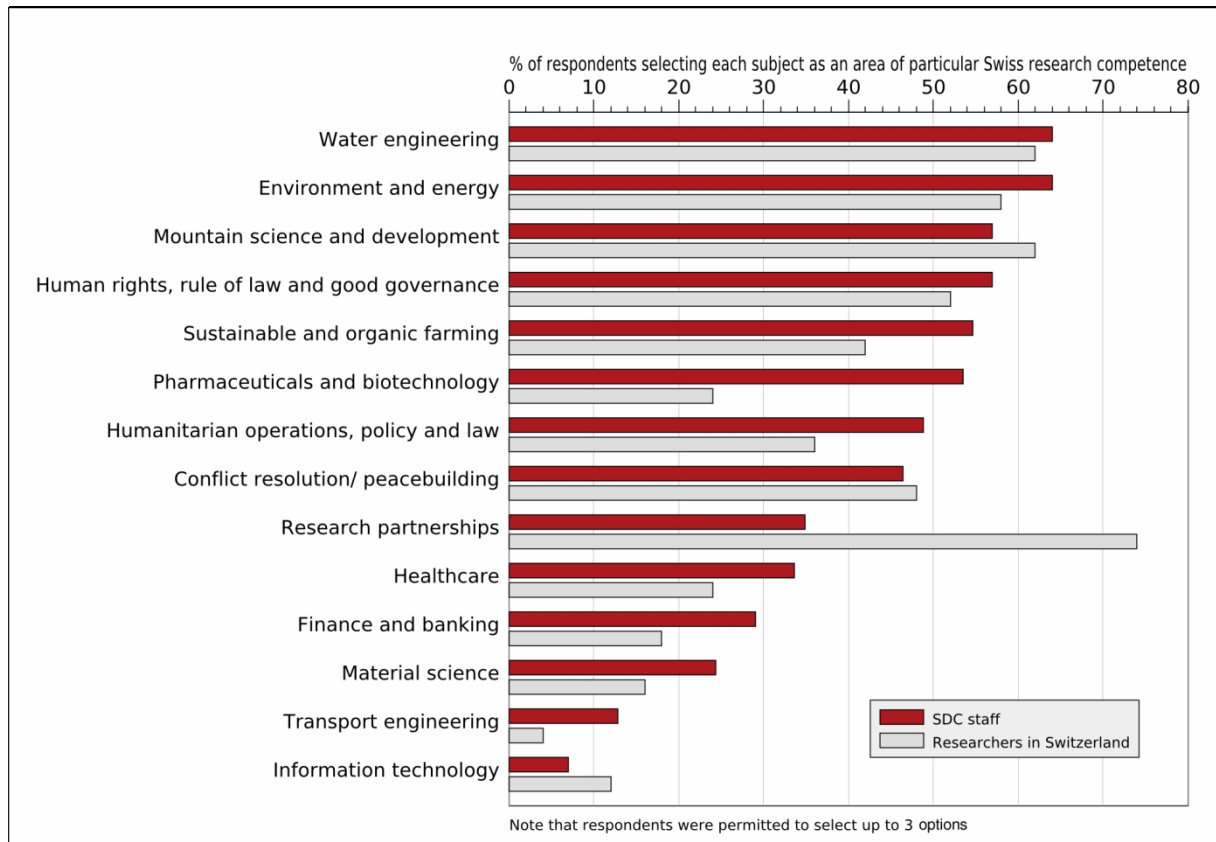
73. The sectoral classification of research shown in figure 1 is similar to the overall thematic allocation of SDC's spending (compare figure 1 with Graph 2 in SDC's 2007 Annual Report). For example, agriculture and rural development is the largest area of SDC bilateral expenditure and also the main focus of research spending (in particular multilateral contributions to the CGIAR).³⁷ Environment and water are also major priorities for SDC'S overall bilateral spending. However, there are two areas of thematic concentration in SDC's expenditures that receive disproportionately low research spending allocations: education and rule of law/ democracy.
74. It is important to note the limitations to this sectoral classification of SDC research funding. Many researchers in Switzerland identify themselves strongly with an interdisciplinary (linking social and natural sciences) or transdisciplinary (including stakeholders outside of academia) approach that does not fit within a single thematic category. For example, within the NCCR North-South programme there is a strong interest in undertaking research which bridges environmental science, natural resource management, and social science disciplines.
75. Debates on the thematic focus of SDC's research portfolio centre on three main questions. First, are the thematic priorities for research relevant to addressing development problems and achieving SDC's strategic goals? Second, is the portfolio sufficiently focused to achieve critical mass on certain research topics? Third, do SDC's research funding priorities reflect subject areas of particular Swiss research competence? The following paragraphs address these questions in turn.
76. **Development relevance.** The evaluation team found that most of the SDC funded research projects examined appeared to have a high level of relevance to development problems. As will be discussed in chapter 10, SDC's project and programme management procedures clearly attach a high level of importance to the screening of proposals against relevance criteria. The questionnaire survey also indicated a general consensus amongst SDC staff and researchers in Switzerland that research activities funded by SDC are relevant to development. The questionnaire responses indicate general agreement with the statements: "the research topics funded by SDC reflect SDC's strategic priorities", and "SDC's research activities cover topics that reflect the most pressing global development problems" (see Annex 7, tables 15 and 40).
77. **Focus and critical mass.** The results of the questionnaire survey indicate that there is a strong feeling within SDC that its research activities are somewhat fragmented and better results could be achieved by focussing more resources on fewer thematic areas where critical mass is possible (see Annex 7, table 18). The evaluation team shares this view, but would caution against an interpretation that this is a particularly serious problem requiring a radical rationalisation of the themes being funded. The sense of fragmentation in the portfolio is more the result of the large number of individual and small projects than an attempt to cover too many topics. The pattern shown by the bar chart in figure 1 indicates that the portfolio is clearly focussed in a few areas. There is also some evidence of interconnection and emerging synergies within and between these topic areas.³⁸ However, it is also the case that there are many small initiatives on rather specialised research topics that are not well linked to the wider research programme and are not afforded much attention by SDC.

³⁷ In addition, there are many bilateral programmes involving individual CG centres, which help SDC to capitalise on and draw synergies from its multilateral investment in the core funding of CGIAR system

³⁸ Examples include research links between the ETHZ and STI on animal and human health issues, and joint research between STI and EAWAG/SANDEC on water and sanitation and health issues

78. Focus on subject areas of particular Swiss research competence. The questionnaire responses from SDC staff and researchers in Switzerland indicate a high level of consensus on the question of where Switzerland possesses particular research competence. The results are illustrated in figure 2 below.

Figure 2 – Areas of Swiss research competence identified by respondents to the questionnaire survey



There is a close correspondence between the perceptions of Swiss research competence shown in figure 2 with the actual breakdown of SDC research funding shown in figure 1. The questionnaire survey results also indicate that most respondents agree that in broad terms SDC is focussing its research investment on areas of Swiss research competence. The main anomaly appears to be the strong focus on agriculture and rural development in SDC's funding that does not appear to be reflected to the same extent in SDC and Swiss researchers' perceptions of Swiss research competence. However, the bulk of SDC's spending in this area is directed at the CGIAR centres internationally through multilateral and bilateral programme, rather than spending on agricultural research in Switzerland.³⁹ This does raise the question as to how SDC can gain greater synergy from its investment in CGIAR in relation to agricultural research undertaken in Switzerland.⁴⁰

³⁹ The main recipients of research funding for agricultural research in Switzerland are ETHZ North-South Centre (former ZIL), EPFL (partner in the Indo-Swiss biotechnology programme) and CABI Europe

⁴⁰ One example of such synergy is the Research Fellow Partnership Programme managed by the ETHZ North-South centre that funds doctoral and post-doctoral fellowships and research placements with CGIAR centres. However, there do not appear to be many other examples of links between research activities in Switzerland and SDC's support for CGIAR research

79. There are a number of subject areas that appear to be underrepresented in the SDC research portfolio. These include:

- **Pharmaceuticals.** Switzerland's strong pharmaceutical industry possesses considerable research capacity, but this is untapped by SDC. SDC does not appear to have substantially engaged with innovative financing instruments to create incentives for research by the private sector on diseases affecting the poor, for example forward purchasing agreements for vaccine development. One exception is the Medicines for Malaria Venture, part funded by SDC.
- **Mountain science.** With the exception of SDC's long-term financing of ICIMOD in Nepal, SDC's research portfolio does not reflect the importance attached to mountain science as an area of particular Swiss research competence.
- **Conflict prevention and peace building.** Although SDC's portfolio includes some small initiatives in this area, this does not reflect Switzerland's long tradition of engagement and research competence in this area. Research on humanitarian operations, policy and law is also underrepresented. One of the reasons for this apparent mismatch is that conflict and security are often considered to be the responsibility of the Political Affairs Division IV: Human Security of the Federal Department for Foreign Affairs and the Federal Department of Defence. However, it should also be noted that 'promoting human security and reducing security risks' is named as one of the three priorities for development cooperation in the South Dispatch. This does not appear to be well reflected in SDC's research spending priorities.

8.5 Breakdown of research spending by instrument

80. Analysis of SDC entries into the ARAMIS database for 2007 and 2008 indicates that in 2007 and 2008 SDC provided 82.7% of its research funding in the form of research contributions and 17.3% in the form of research mandates. Multilateral organisations received almost all of their funds in the form of contributions.
81. Further analysis of project documentation by the evaluation team has shown that there are important differences in the way that research contributions are managed. While some research contributions are core contributions that can be used by the recipient without restriction, others are earmarked in the sense that their credit agreements specify a set of activities for which the funds may be used. SDC refers to the latter practice as 'soft earmarking', because the broad lines of activities are defined in the credit agreement, but management and implementation responsibility may be fully in the hands of the recipient. Research mandates embody a stronger form of earmarking, and where SDC is responsible for project management and monitoring.⁴¹
82. In view of these distinctions the evaluation team has reclassified the ARAMIS database entries to provide a more meaningful assessment of the extent to which SDC's research funding is provided as unearmarked contributions or funding linked to specific research activities. Based on the reading of project texts held on the ARAMIS database, it has been possible to divide SDC's research spending into two categories: (1) unearmarked research funding, meaning core funding to research organizations where research activities are not specified, or only described in very general terms, and (2) earmarked and softly earmarked research funding, which includes project or programme funding for a specific set of research activities, against which various reporting and monitoring requirements or mechanisms are put in place. Table 2 shows the division of unearmarked

⁴¹ Of the 113 research contributions funded in 2008 the evaluation team found that 50 were earmarked or softly earmarked in the sense that their credit agreements specified the activities for which the funds should be used. Of the 46 mandates funded in 2008, 6 did not include a specific description of a research activity, and were considered to be unearmarked

and earmarked research spending between different recipient types. For comparison the distinction between research contributions and mandates is also shown.

Table 3 – Unearmarked and earmarked⁴² research spending by recipient type

	Evaluation team's reclassification		ARAMIS classification	
	% of funds to each recipient provided as unearmarked and earmarked funding 2007-2008		% of funds to each recipient provided as contributions and mandates 2007-2008	
	% unearmarked	% earmarked	% contributions	% mandates
Multilateral organisations	79.7%	20.3%	98.4%	1.6%
- of which CGIAR centres	79.6%	20.4%	98.4%	1.6%
Other organisations with international membership	80.0%	20.0%	78.3%	21.7%
- of which regionally based organisations	77.4%	22.6%	80.7%	19.3%
Nationally based organisations				
- Swiss based organisations	18.4%	81.6%	56.2%	43.8%
- Other European or North American organisations	69.0%	31.0%	100.0%	0.0%
- Organisations based in South or East	42.5%	57.5%	68.6%	31.4%
North-South programmes	85.2%	14.8%	99.4%	0.6%
Total	62.1%	37.9%	82.7%	17.3%

83. Table 3 shows that SDC spends 62% of its research funds on unearmarked activities and 38% on earmarked (or softly earmarked) activities. In terms of numbers of projects the division between unearmarked and earmarked spending is closer to 50:50. While multilateral and other international organisations receive most of their funds as unearmarked core contributions, SDC's funding of nationally-based organisations is heavily earmarked.

Having divided the ARAMIS dataset into unearmarked and earmarked research activities, the evaluation team undertook a further classification of earmarked funds to describe their particular type of purpose. The results are shown in table 4.

⁴² Here the term 'earmarked' refers to earmarked and softly earmarked research spending

Table 4 – Specific types of earmarked research spending

	% of total funding 2007-2008	Active projects in 2008
Unearmarked research spending	62.1%	96
Earmarked research spending	37.9%	90
- research projects concerned with development cooperation policy for use by SDC	0.8%	8
- research projects concerned with addressing problems of developing and transition countries	16.2%	32
- traditional development projects in the field with a research component	13.5%	31
- projects concerned mainly with building capacity of research institutions in developing and transition countries	4.3%	10
- training, studentships, study visits, exchanges	3.2%	9

84. The main type of earmarked research funding is for research projects concerned with addressing problems of developing and transition countries. This category is defined as projects with a high research content that are focused on a well defined problem directly affecting people in developing and transition countries. The second most frequently encountered category of earmarked funding are traditional development projects in the field that include a research component. For this category the research content of each project is typically less than 30%.
85. The analysis shows that projects concerned mainly with institutional capacity building make up a small part of the portfolio. However, there are many more projects that contain some element of institutional capacity building among other activities. Among the unearmarked core contributions for multilateral organisations, it can also be assumed that there is significant support for institutional capacity building. It must also be emphasised that the majority of SDC funded research projects appear to include an element of *individual* capacity building, although it has not been possible to measure this.
86. A striking finding of this analysis is that less than 1% of SDC's research funding is concerned with SDC development cooperation policy. Only eight projects were found to fit into this category, which describes research primarily for use by SDC to enhance its own effectiveness at the policy and operational level. This finding is surprising given the emphasis given to this type of research activity in the 2002 Research Policy paper (referred to as *Ressortforschung*).

8.6 Financial dependence of Swiss researchers on SDC and other sources of funding

87. The results of the questionnaire survey provide useful evidence on the extent to which recipients of SDC research grants are financially dependent on this source of funding. As indicated in Table 5 below, SDC is an important source of funding to Swiss researchers involved in SDC funded research projects and programmes, but their level of dependence on SDC research funding is rather low. Less than 20% of these researchers receive more than 40% of their research funding from SDC. It is evident that research grants from the Swiss National Science Foundation, universities and other sources are much more significant for these researchers than grants from SDC.
88. In the case of the North-South and West-East programmes SDC is not funding development research in Switzerland (which is supported by the Swiss National Science Foundation and universities), but is playing a complementary role by funding the Southern or Eastern research partners of development researchers in Switzerland. This

appears to be a successful model where SDC has used its own ODA resources to support research in developing and transition countries, while at the same time stimulating research partnerships between these countries and Switzerland, and thereby creating greater interest in collaborative development research in Switzerland.

Table 5 – Reported levels of financial dependence on SDC

Responses by participants in SDC funded research programmes in Switzerland to the question: "Please indicate the extent to which the research activities under your personal responsibility are funded by SDC and other sources:" Note that respondents included Switzerland based recipients of SDC funds and Switzerland-based participants in SDC supported North-South programmes.⁴³

	Less than 20%	20-40%	40-60%	60-80%	More than 80%	Number of respondents
SDC funds	43.6	38.9	16.7	0	1.9	54
Swiss National Science Foundation	36.2	42.6	14.9	0	6.4	47
Funds from own university of research institution	42.9	40.8	14.3	2.0	0	49
Other funds	27.5	42.5	12.5	10.0	7.5	40
					answered question	54
					skipped question	3

Source: Annex 7, table 37

89. The same analysis was undertaken to gauge the level of financial dependence on SDC by research partners in developing countries. The level of financial dependence reported by the developing country researchers again appears to be quite low, most commonly in the 0-20% range (see Annex 7, table 61). Small grants appear to be the norm as more than half (55%) of developing country recipients reported that their organisation received less than US\$25'000 per annum from SDC.

8.7 Political influences on research funding

90. During its work, the evaluation team encountered examples of the allocation of SDC resources to projects and programmes that were commonly acknowledged to reflect a "political" logic. The analysis of the beneficiaries of research funding suggests that 'politics' has influenced the portfolio in two main ways:
91. First, in relation to the allocation of funds spent on research activities in Switzerland, there has been a tendency to ensure a balance of funding between all of the major research centres. This reflects the nature of the federal political system and the need to balance cantonal, regional, and linguistic interests. Such considerations are by no means restricted to SDC's research spending, and affect all federal spending. It is also the case that the major Swiss development research centres form an effective lobby that on a collective basis has supported SDC's research funding, and on an individual basis has sought to attract funds to particular research centres. SDC tends to be receptive to such voices because the development research community is generally supportive of development cooperation, and has helped SDC make the argument for continued ODA spending. While acknowledging that these political processes are clearly active, it is important not to exaggerate their importance given the rather limited SDC research funding allocated to organisations based in Switzerland, and their rather low level of financial dependence on SDC funding.

⁴³ To interpret the table note that each row should add up to 100%. For example 43.6% of surveyed participants of development research programmes in Switzerland (for which SDC is a funder or partner) received less than 20% of their funds from SDC

92. The second type of 'political' influence reflects the common tendency for individual funding decisions to reflect personal connections between SDC decision makers (on all levels) and individual researchers or research centres. It is important to stress that this does not involve personal self-interest and abuse of power, but rather the tendency for SDC staff to have close personal and professional contacts with the research community, and to make these connections on the basis of the particular development topics that interest them. In addition, there is some evidence that the regional political interests of persons in a leading position within the government has sometimes led to funding decisions that are favourable to a particular research centre. While these tendencies reflect the political and social reality of Switzerland, they are somewhat damaging to the effectiveness of SDC as a development research funder because they make it more difficult to follow a previous agreed strategy, and increase the risk that the diversion of funds towards political and personal pet projects will result in a sub-optimal resource allocation. Moreover, such projects are often terminated once SDC decision-makers change positions or leave. Such, at times, abrupt interruptions in collaboration can be difficult for SDC partners, not least in developing countries, as key informants in the Swiss research community have testified. In examining the portfolio the evaluation team finds that such tendencies have moderately affected SDC's research funding. However, there is increasing recognition of this problem within SDC, and a determination to move towards strategy driven funding decisions.

Key informants in the Global Division also introduced the political idea that support to research should be undertaken in order to increase Switzerland's credibility in international issues of global importance. Support to research for instance on climate change in southern countries would not only provide insight into the bargaining position of southern partners, but would also contribute credible new knowledge in international negotiations.

9. Evidence on the results of SDC's research investment.

93. This section considers the results of SDC's research investment by addressing the following questions:

- What evidence is available to the evaluation on outputs, outcomes and impacts?
- What evidence is there on the utilisation of research results (within and outside SDC)?
- What evidence is there on the performance of different models of capacity building and North-South partnerships?
- What examples can be provided of well performing and badly performing types of research activity?

9.1 What types of evidence are available on outputs, outcomes and impacts? Where are the gaps?

94. Determining the results of research has proven elusive to many that have attempted it. Outputs are largely known and frequently listed. However, assessments of impacts and outcomes constitute a major gap. This is partly methodological. Outputs are defined as tangible entities that can usually be seen, felt or moved about. However, outcomes are the expected consequences of the outputs and are usually harder to measure. The effects of a single research output may need to be added to many others before it has an impact, and this process might take many years. Furthermore, as suggested earlier, the impact of research will be a function of a large number of other elements of the system being in place. It is more likely that people will act on evidence that is built up over many years, in different contexts, and only when this has been communicated effectively. Even when research helps shape policy and practice, it can sometimes take years to see the benefits to poor people. It is also a characteristic of research that some of it will fail or lead nowhere. But, it may be argued that the cost of such failures can readily be recouped by one or two big successes.⁴⁴
95. A senior SDC staff member expressed the dilemma succinctly in a recent speech: "we are aware that the results of some research cannot be measured in the way one can for example measure economic changes ... but we would like [researchers] to demonstrate more often that research is a useful tool for development"... "in short, the pressure to demonstrate results has been growing in recent years and this will catch up with research funded by official development assistance".⁴⁵
96. The problem is well illustrated by the recent evaluation of the CGIAR system, which notes that the impact of research is a function of many other complementary inputs: "adoption depends on local collective action, extension services, or assignment of property rights. That means that the spillovers can be very limited, and the overall impacts constrained" (page 3). It is also noteworthy that this prestigious and mainstream evaluation concludes that "the Centres cannot be held accountable for the final delivery of their products to the poor, but they do need to be part of a larger strategy and set of arrangements with donors and other partners to achieve specific development-based outcomes" (page 7/8).
97. In some sectors, particularly in the health sector, there is a strong tradition of statistically significant impact assessment. A great deal of money is allocated to epidemiological studies that establish the impact of particular interventions with statistical rigour.⁴⁶ But, in most sectors, and in most research projects the model of change is unspecified, base

⁴⁴ As argued in the recent CGIAR evaluation

⁴⁵ Toni Stadler, speech to the ETH North-South Forum, May 5th 2009: From Research to Implementation, page 4

⁴⁶ The SDC funded the IMPAMEL project undertook trials on a new treatment regime for the treatment of trypanosomiasis, which resulted in demonstrable efficacy for a treatment schedule that uses substantially less of the treatment drug (see the case study of the East African Trypanosomiasis project, annex 8)

lines are not put in place, and the chance of producing statistically significant evidence of impact is low.

98. A further note of caution should be added to the analysis of research results in the evaluation, as solid evidence in this respect has been difficult to obtain. The evaluations of individual SDC-supported research projects (such as those analysed in the meta-evaluation) often provide information on outputs, but more rarely on outcomes/impacts. The case studies also give valuable insights into management processes and research processes, but they are too few in number to make any generalisations about research results. This points to a general problem faced by SDC in demonstrating the results of research activities. While it is relatively straightforward to provide evidence of individual successes and failures, such information is not captured systematically across the research portfolio.

9.2 Evidence on outputs, outcomes and impact from the review of evaluations case studies and meta-evaluation

99. The 10% sample of SDC credit proposals to support research showed that nearly all clearly expected results at an output level (91%), but only half at the outcome level. Just over a half (52%) included clearly specified indicators at the output level, and 30% at the outcome level. The inclusion of indicators in SDC project documents has been improving over time, but there is still very little discussion of outcomes.
100. The meta-evaluation of evaluations of individual SDC-supported research projects (Annex 6) shows that most of the evaluations surveyed included an analysis of outputs (articles published, people trained, improved capacity, etc.), but did not produce evidence of outcomes. The meta-evaluation shows that the most commonly cited output was knowledge that could be used by practitioners (81%); just under 60% produced new knowledge in journals. Capacity building was achieved in 76% of the projects evaluated, with over 60% of the evaluations showing improved capacity to utilise research (see table 8 annex 6).⁴⁷
101. The evidence from the case studies shows a similar pattern. For almost all the projects examined outputs were clearly listed (over 90% of those examined). However, only one third had logical frameworks, and only two had an explicit model of change. Only those projects which started out with a clear diagnosis of the “innovation system” were able to provide a clear model of change, and to report on outcomes associated with behavioural change. Generally individual projects do not report on other parts of the innovation system, and do not report on what other inputs are necessary for their work to achieve an impact.
102. Six of the case studies were able to address issues of outcomes, and five were able to demonstrate impact in terms of raising incomes. These impacts included the numbers of households whose incomes had been raised by research related outputs (e.g. with vegetable seeds in Nepal) or in terms of behavioural changes in the participants, such as farmers groups or private sector actors relating to commercialisation and innovation (in relation to potatoes in Peru). Unlike SDC administered projects, the SCOPES case studies were reported to use the National Science Foundation’s systematic questionnaire to report outputs, impacts and the quality of the partnership. This was regarded as useful, effective and not too onerous on the researchers.

⁴⁷ The research could have more than one output, therefore the percentages exceed 100%

103. The NCCR North-South programme (like other NCCRs) is able to produce impressive lists of outputs and has recently begun to invest serious resources into the processes required to track outcomes resulting from its work.⁴⁸ In addition, SCOPES and Research Partnerships with Developing Countries use the SNSF questionnaire to report outputs, impacts and the quality of the partnership.
104. The independent evaluation of CGIAR was the only evaluation of SDC supported research that examined rates of return to investment in research. It notes that “rates of return have been high on some research, high enough to show that the CGIAR has more than paid for itself” (p2). Even so they concluded that with so many top scientists working on aspects of agriculture in developing countries, the CGIAR “is not achieving its full potential” (p 1). Furthermore they noted that the benefits (for poor people) of such research depend on further assumptions about how the knowledge will be taken up (for instance by seed producers, and changed farmer practices), how the complementary inputs (such as water and fertiliser) will be provided, and how the resulting products will be used or brought to effective markets.
105. The evaluation of the International Centre of Insect Physiology and Ecology (ICIPE) also suggests that the programme’s impact is probably limited by lack of extension and dissemination.⁴⁹
106. The complexity involved in determining impact and the underlying models of change is well illustrated by the research supported by SDC on anti malaria bed nets. Pioneering research on the efficacy of insecticide impregnated bed nets was undertaken by the Swiss Tropical Institute (together with other researchers in Gambia, the WHO and elsewhere).⁵⁰
107. However, the effectiveness of the various current implementation programmes is due in significant measure to the “invention” and development by a Japanese company, Sumitomo Chemical Company, of a resin-based fibre that retains insect repellent properties for at least 5 years in African conditions and repeated washing.⁵¹ This example illustrates that impact often depends on complementary inputs, effective commercialisation and wider processes of innovation, and cannot usually be attributed to a single research input.

9.3 Evidence relating to the utilisation of research results (within and outside SDC, in countries in South and East)

108. The meta analysis of evaluations shows that often the objectives of the programmes were to produce “results oriented research (86%). The evaluations cited a wide range of users of the research outputs, with the largest category being suppliers of goods and services too poor people (57%) and government (48%). Over 40% of the evaluations suggested that among the main users were members of the research network. Only 15% of the evaluations suggested that SDC’s head office were users with 24% citing SDC country offices.

⁴⁸ In relation to outputs the NCCR North South reports the following from the first seven years of operation Publications with peer review: 297, Publications without peer review: 174, Articles in anthologies: 286, Books: 91, Reports: 576, Presentations at congresses: 1542, Services: 64, Products/prototypes etc.: 53, Start-up/spin-off: 2

⁴⁹ ICIPE External R&D Review Report 2002–2007 2007 International Centre of Insect Physiology and Ecology, ISBN 92 9064 196 7 Franz Bigler, Agroscope, Switzerland, Jan O. Lundström, Uppsala University, Sweden, Ebbie Dengu, Consultant, Harare, Zimbabwe. Also note that the case study on the INCOPA programme was in part a response to the closure of extension services in Peru (see Annex 8)

⁵⁰ Lengeler C. 1998. Insecticide treated bednets and curtains for malaria control (Cochrane Review) The Cochrane Library, Issue 3. Oxford. MacCormack CP, Snow RW, Greenwood BM. 1989. Use of insecticide impregnated bed nets in Gambian primary health care: economic aspects. Bulletin of the World Health Organization 57: 209-214

⁵¹ Takaaki Ito and Takeshi Okuno, Development of ‘Olyset net’ as a Tool for Malaria Control, translated from Sumitomo Kagaku, volume 2006-II

109. In relation to the usefulness of SDC supported research to SDC itself, key informants in Switzerland provide a somewhat mixed picture. They rarely considered their research as being designed to help SDC's operational programmes.
110. The NCCR North-South team, for instance, felt that it was not possible (nor desirable) to tailor their research to SDC priority countries of focus or on SDC topics because the research cycle was often much longer than the changes in SDC policy. Examples were cited such as the high quality research on water and sanitation that contributed directly to (and was directly the result of) SDC programmes in the Mekong delta. However, this was terminated when SDC policy shifted to other topics. Similarly there are areas of research (such as NCCR research on migration) which pre-date SDC's interest, but which in future could contribute to a firm analytic and empirical foundation for SDC's programmatic work in this area.
111. The potato innovation programme in Peru provides an example of an intermediary case that could provide SDC with generic lessons about new approaches to integrating research with operational programmes including with the private sector.
112. The case studies also provide a mixed picture on utilisation by SDC. There are certainly examples in which a relative small research component has been usefully added to a priority area for SDC programme activity. This appeared to be particularly so for the vegetable seed production in Kathmandu. But, at the same time there were a larger number of examples in which the country offices felt the research offered no practical addition to their programmes, or it was not intended to do so (e.g. ICIMOD, and Trypanosomosis in East Africa, see annex 8).

9.4 Evidence on performance of different models of capacity building and North-South partnerships

113. The portfolio analysis shows that almost all SDC support for research contains elements related to build capacity in the south or the east (this is consistent with the 71 % of the projects reviewed in the meta evaluation that were said to have created capacity). But, activities specifically aimed at institutional capacity building are quite small in number (projects concerned with building capacity of research institutions in South or East constitute only 4.3% % of total funding 2007-2008, and representing only 10 active projects in 2008)⁵².
114. Within the SDC portfolio there are a wide range of intervention strategies for building capacity. Many key informants regarded SDC organisational support to the Ifakara Health Centre in Tanzania, and the Swiss Centre for Scientific Research in Côte d'Ivoire (now funded by the Secretariat for Education and Research), as well as the 2IE centre (Institut International d'Ingénierie, de l'Eau et de l'Environnement) in Burkina Faso, as being exemplary. These successes involved long standing commitments over decades and involved substantial levels of funding.
115. In recent years SDC's most frequently used approach to building capacity has been at the level of individual and teams of research partners. The underlying model of change is rarely specified, but it is assumed that the trained individual can find an opportunity for subsequent employment in an institution in which they can put their skills to good use.⁵³ In some key informant interviews building research capacity was valued primarily in terms of enabling individuals in developing countries to acquire the skills of the "scientific method" and the culture of the scientific approach.

⁵² It should be noted however that there are many other training projects outside of ARAMIS

⁵³ Key informant interviews at SANDEC (Water and Sanitation in Developing Countries at EAWAG a research institute within the Domain of the Federal Institutes of Technology- ETH) stressed the importance that they attach to finding posts for people from developing countries that they had supervised to get PhDs, and their preference for this modality rather than being committed to support a particular organisation who may or may not be able to find competent candidates

116. Enhancing the capacity of individuals has frequently taken place in the context of SDC supported north/south partnerships. While these have been successful in building capacities, there would seem to be a number of additional advantages when these partnerships are embedded in larger networks, involving several countries both in the north and the south. There are examples of the South/South components in the SDC portfolio, including within the NCCR NS, the network associated with innovation in potatoes, the East African network on Trypanosomiasis, and the networks associated with water and sanitation. Some of these arrangements have the advantage of being able to achieve a greater critical mass of effort through co-financing from other donors, and having governance systems which strengthen the voice of the southern partner in the control of resources and the choice of research topics.⁵⁴
117. The questionnaire surveys conducted for this evaluation confirm that both researchers in Switzerland and their partners in developing countries hold positive views about the value of research partnerships. There was widespread consensus that research partnerships had had a strong impact in the following areas (ranked in descending order of importance): building research capacity in the partner country at the level of individual researchers, building a lasting network of international connections, ensuring greater use of the research findings in the partner country, strengthening the capacity of the partner institution as a whole, and contributing to high quality research results (see Annex 7, tables 52 and 68). The questionnaire surveys also confirmed that both researchers in Switzerland and their partners in developing countries believed that all of the KFPE 11 Principles for Research Partnerships had generally been adhered to (see Annex 7, tables 53 and 69).
118. If the consensus among donors is to focus on capacity building at the level of organisations this may well have consequences for SDC in the future. Building the capacities at the level of organisations implies a commitment of donor resources that will exceed those of most bilateral donors unless they “harmonise” their efforts with others.⁵⁵ In this regard, the ODI review of capacity building in Africa also draws attention to the fact that while *“there is a growing level of coordination and collaboration among development research donors with respect to support for research capacity building, particularly in the form of jointly funded intermediary organisations and thematic research networks. However, there is still much room for improvement, especially given very high capacity strengthening needs in Africa and still relatively limited funding”* (page 23).

9.5 Examples of well performing and badly performing types of research activity.

119. The evaluation found a large number of activities that could be judged successful in meeting the objectives they set for themselves. However, far fewer could be said to have made a significant impact at the level of helping SDC to achieve its development goals. There is a strong sense that there are many small research activities, which are moderately successful in their own right, but on an aggregate level are simply not on a sufficient scale to make a substantial development contribution.

⁵⁴ SDC has been able to harmonise its research through its contributions to international research centres of the CGIAR and through ICIMOD. It has also done so at the country level such as through the ‘funding pool’ for the Ifakara health centre

⁵⁵ A recent evaluation of capacity building in Africa shows how SIDA had a significant impact by focussing a substantial amount of money in one country. Evaluation of Research Cooperation: Burkina Faso and Sweden Sida Amitav Rath, Team Leader Hocine Khelfaoui, Jacques Gaillard, April 2009. The aim of the research cooperation program was to strengthen research capacity at the two institutes for higher education and at CNRST with links to three Universities in Sweden. The outputs of research and training were described as “outstanding”. Out of the 22 Burkinabè participants, enrolled in the PhD program, 15 defended their thesis to the end of February 2009. 64 publications were published in scientific journals, of which 40 are in international journals. The mean number of publications per participant in the program (3.37) “an outstanding achievement given that six of them are yet to defend their thesis”

120. Of the 14 case studies examined, eleven could be regarded as unequivocally successful.⁵⁶ The two projects at the International Potato research centre in Peru have been highly successful in developing a new approach to linking research to production. It does so through a clear model of change that has resulted in the involvement of a wide range of actors, including farmers groups, the private sector, government and NGO as well as researchers.⁵⁷
121. The Vegetable Seed Project in Nepal also provides an example of success that was regarded as particularly valuable to SDC in that a relatively small amount of support to research was combined with an effective service delivery programme. This too involved the private sector.
122. Other successes of this type became apparent in the key informant interviews which revealed examples where Swiss research institutions had combined back-stopping for SDC, service delivery and high quality research (though not all of these were necessarily supported by SDC). SANDEC and STI actively use this model.
123. In a somewhat different manner the East African network on Trypanosomiasis EANETT was highly effective in terms of using Switzerland's considerable reputation in this field to build an effective network of East African research institutes working on this neglected disease. However, the results of this activity were of little direct use to SDC.
124. NCCR north-south programme provides a model of collaborative research that could serve SDC well in the future. Some of its key strengths include its long-term programmatic approach, thematic focus on a number of interdisciplinary topics, emphasis on building networks and a solid management and governance structure.
125. Several cases examined by the evaluation team suggest that where projects appear to have been funded on political grounds the risk of poor performance is greater. For example, case study evidence of IFF-SDC partnership suggests that some of the problems that occurred in the past resulted from the high level political support given to the partnership, which limited the ability of SDC managers to demand greater accountability for results.
126. Within the SCOPES programme there appear to be many good examples of building long term partnerships between Switzerland and Eastern Europe. For example, one of the case studies included in this evaluation (transition to adulthood and collective experiences in former Yugoslavia TRACES programme) demonstrates the establishing of a strong research partnership between Lausanne and Zagreb.
127. The success of the projects examined in the small sample of cases is supported to some extent by views of SDC staff expressed in the questionnaire. Of the projects that SDC staff cited as most useful to them, the most frequently cited programme (in answer to an open-ended question) was the NCCR N-S (7), the CGIAR (5), Ifakara health centre (4) and SCOPES (3).
128. There are clearly elements with the CGIAR that are successes (not least the programmes at CIP, but also the SDC supported Hill Maize Research Project implemented by the International Maize and Wheat Improvement Centre (CIMMYT) in Nepal, and programmes in Vietnam with the International Rice Research Institute). However, many donors including SDC have been concerned about the CGIAR's performance and its inability to adapt to current challenges. The recent evaluation of

⁵⁶ the three Tanzanian examples do not yet contain sufficient detail to make judgement

⁵⁷ In 2007 the Peruvian partner of Papa Andina- the INCOPA project- won two international awards for its Tikapapa initiative. The first was the "Seed Awards 2007" of the United Nations, awarded to 5 projects out of 230 selected from across the globe. INCOPA also won "The World Challenger Award 2007", of the BBC and Newsweek magazine. 940 projects participated in this competition which awards business initiatives that not only look to make profit but also invest in farming communities (Papa Andina. Informe Anual 2006 – 2007. p. 30)

the CG concludes that “The CGIAR, however, suffers signs of age as it turns 37. It is in urgent need of structural change if it is to respond with its full potential of new challenges of food and environmental security. A renewed and rebalanced partnership is essential for the CGIAR System to improve its game” ⁵⁸ (page 1). However the evaluation emphasises how difficult the organisation is to reform noting that “the CGIAR system has been attempting reform since 1994” (page 2).

129. In 2009 the CGIAR embarked on the implementation of the integrated reform proposal based on the external review. SDC is monitoring this process closely through its participation in the European Initiative for Agricultural Research for Development.
130. Similarly, the International Centre for Integrated Mountain Development (ICIMOD) is currently undergoing a process of reform to enable it to be more effective for the operational requirements of member countries and the operations of donors such as SDC.
131. A considerable success of the SDC programme has been the achievement of the objective set some ten years ago of building research capacity and a development-engaged constituency in Switzerland. Key informants suggested that SDC support was instrumental in them orientating their research towards development. However, many of the organisations that were assisted have invested considerable amounts of their ‘own’ funds into this area of research, and feel that SDC has an obligation to continue supporting them in future. This could represent a significant constraint on SDC’s room for manoeuvre as it moves into the next phase.

⁵⁸ Independent Review of the CGIAR System, Synthesis Report, Elizabeth McAllister, Chair, November 2008

10. Research management

132. This section addresses the question of how well SDC manages its research activities. It covers the following issues:
- What processes does SDC use to steer and adjust the research portfolio?
 - How does SDC award research funding?
 - To what extent has SDC implemented the principles of Results-Based Management
 - How well does SDC evaluate its research projects?
 - How does SDC conduct its relationships with research projects and programmes, and its key partners?
 - What lessons can already be drawn about how effectively research is being managed within SDC's new organisational structure following reorganisation?
 - How does SDC's management of research compare with other research donors?

10.1 General description of research management in SDC

133. In many senses the management of research projects is no different to normal project management in SDC. There is no research budget. Research activities are funded through SDC's normal instruments, namely multilateral contributions, and contributions and mandates within the bilateral programme and contributions to North-South/West-East partnership programs.. The responsibility for managing research activities rests with individual programme officers across the organisation. However, a coordinating function is provided by the 'research desk', which since the reorganisation has been located within the Analysis and Policy division in the Global Cooperation Department. While the research desk only manages part of the research portfolio (mainly the North-South programmes), the responsibilities of this post also cover research policy more generally, monitoring the portfolio, updating the entries into the ARAMIS database, and ensuring coordination with other federal departments.
134. Prior to SDC's reorganisation many of the research dossiers were managed by thematic experts within the 'F' department. Following the abolition of this department, staff were redeployed, and responsibility for managing individual projects was reallocated across the new organisational structure according to its geographical divisions and thematic networks. Project management responsibilities are also increasingly being devolved to the Cooperation Offices. Another consequence of the reorganisation has been the separation of the research desk from SDC's internal knowledge management function, which is now under the Knowledge and Learning Processes Division within the Global Cooperation Department. The implications of SDC's reorganisation for research management are discussed in greater depth in section 10.8.

10.2 Portfolio management

135. SDC does not manage its research activities as a single portfolio. This makes it very difficult to direct SDC's research priorities according to strategic decisions. In practice SDC's research activities have evolved over time through largely *ad hoc* processes, and funding decisions made on a case by case basis. While SDC's operational committees are formally responsible for decisions on project funding, continuation and closure, it is clear that individuals wield significant influence, and that decisions sometimes have a political or personal element (see section 8.7).
136. There are some advantages to this approach that allows for considerable flexibility in being able to fund promising research initiatives that arise. Individuals within SDC have significant freedom to engage with particular research initiatives, and their personal interest can be a motivating factor that is very enabling for innovation.

137. However, there is a deep downside to the present management arrangement, which has led to a proliferation of projects, fragmentation of the portfolio and a lack of strategic vision. SDC tends to act in a responsive mode in its research funding reacting to funding opportunities that arise. While this often results in worthy initiatives being funded, there is little sense of SDC acting in a directive and proactive mode, setting the research agenda according to priorities that it establishes according to its overall strategic and developmental goals.
138. One of the main obstacles to more effective and strategic management is the sheer complexity and fragmentation of the research portfolio. With 222 open or recently completed projects recorded on ARAMIS, it is very difficult to oversee effectively all parts of SDC's research funding and to discern its overall direction. The deficiencies in SDC's use of ARAMIS as a management tool highlighted in the portfolio analysis and by the questionnaire survey of SDC staff (see Annex 7, table 26), make this task even more daunting. More active management of the portfolio will depend on having an accurate view of what is being funded, and a management information system that meets the requirements of SDC's research policy.
139. Even if SDC had better knowledge of its research portfolio, there are limited management levers to steer the portfolio according to strategic decisions. Contributions to other organisations must largely accept their objectives and offer little chance for SDC's direct involvement in the selection of topics or delivery of results. Furthermore SDC's decentralised structure, funding recommendations and management responsibilities are scattered across the organisation, and individuals have considerable discretion in setting priorities. There is also a strong sense of inertia in the research portfolio resulting from the tendency to provide follow-on funding for existing research projects rather than to look for new initiatives. While there are many positive aspects to long-term and continuous research funding, SDC is probably excessively conservative in its portfolio management. Of the 20 projects that were included in the document review, 19 represented follow-on funding from earlier phases, and only one was a new initiative.

10.3 Processes for awarding research grants

140. A key finding of this evaluation is that SDC very rarely awards its research contributions and mandates on a competitive basis. For the sample of 22 research projects included in the document review, none appeared to have been procured on the basis of a competitive tender or call for proposals. Direct contracting is the norm for SDC's research funding. The meta-evaluation comes to a similar conclusion: none of the 21 evaluated research projects had been subjected to a tender procedure.
141. SDC staff share this view of the lack of competition in research funding. Their questionnaire responses indicate clearly that staff do not consider that there is "a sufficient level of competition in the selection of research partners for commissioned research." Questionnaire respondents also doubted that "procurement practices for commissioning research are properly adhered to, and are sufficient to generate competition and value for money" (see Annex 7, table 28).
142. A common explanation for the lack of competition in SDC's research procurement is that in the small country context of Switzerland there are few researchers working on each topic, and there are simply not enough research centres to make competition meaningful. However, questionnaire responses from SDC staff indicate that while some agree with this proposition, a slightly larger body of opinion believes that greater competition is possible. There is also a clear desire to open SDC research funding to greater competition including from researchers outside Switzerland. The SDC questionnaire responses indicated very strong agreement with the proposition that

“SDC research funding should be opened up more to research providers outside Switzerland within the EU” (see Annex 7, table 28).

143. In the absence of competitive processes for awarding research grants it is unclear what processes and criteria are used by SDC to select projects for funding. In most cases the project idea and funding proposal appears to originate with the researcher or research organisation, who contacts SDC on a pro-active basis. There is no clear process or point of contact for organisations and individuals to submit research proposals to SDC. One key informant in the Swiss research community explained that it is a matter of using personal connections and networks to locate individuals within SDC who may take an interest in the portfolio and be in a position to fund it. The same informant noted that this is not necessarily an attractive proposition for researchers, and that it is more straightforward and less time consuming to apply to research funders who operate on a more formal basis.
144. In the case of larger research contributions, these are usually awarded on the basis of long-standing relationships with multilateral organisations. The questionnaire responses from SDC again suggest that staff are concerned about such arrangements. The majority of respondents disagreed with the statement that “there are appropriate and known criteria for selecting research contributions.”
145. Within the North-South (or West-East) research programmes there is a much stronger competition for funds. Researchers must submit applications through a formal channel and their proposals must pass through a clear selection process.⁵⁹ Recipients of such funds in the Swiss research community who responded to the questionnaire tended to consider that they had received their funding on a competitive basis (see Annex 7, table 47).

10.4 Project management practices (including results-based management)

SDC manages research projects according to standard Project Cycle Management practice. The processes that it uses have recently been stated by SDC in its questionnaire response to the federal evaluation of research.⁶⁰ This indicates how SDC's project management processes are intended to work in a formal sense, and stress the importance of quality control, monitoring and evaluation and managing for development results.

146. This evaluation has assessed aspects of project management through various methods, including the review of the documentation for 20 SDC funded research projects (see Annex 5). One of the basic problems exposed by this review has been the difficulty of accessing basic project documentation, which is held by individual programme officers, usually in electronic format, but occasionally in hard copy only. To obtain the documentation it is necessary to write to individual programme officers, and sometimes to contact Cooperation Offices. It is clear that the lack of a central electronic repository for key documents is an obstacle to effective project management.
147. The review of project documentation found that the credit agreements (Kreditanträge) and other project documents were usually well prepared, and clearly and concisely drafted to a common format. They all contained an adequate specification of the project activity. Nearly all clearly explained the relevance of the activity to SDC's strategic goals (91% of cases examined), and specified expected results (91% of cases examined).

⁵⁹ For NCCR NS SDC is formally represented on the selection panel. For SCOPES and Research Partnerships in developing countries SDC has an advisory role

⁶⁰ Ressortforschung: Selbstevaluation der Ämter bezüglich Umsetzung der Qualitätssicherungsrichtlinien und Nutzung der Forschungsergebnisse Synthesebericht des Steuerungsausschusses Bildung, Forschung und Technologie (13. Mai 2009)

148. However, project documentation often does not provide an adequate basis for results-based management. Only 50% of the credit agreements contained a logical framework, and the quality of these was rather mixed.⁶¹ Output indicators were only provided in 52% of cases, and outcome indicators in 30% of cases. Furthermore, there was a good deal of variation in the suitability of these indicators, and the extent to which it would be feasible to measure them in practice.⁶² In spite of these deficiencies, there was some evidence that the use of logical frameworks with defined indicators has recently increased.
149. Evidence from the case studies suggests that gender was rarely addressed seriously in the project documentation, in the research or in the reporting of results (see annex 8). However there were exceptions, and there were signs that gender sensitive approaches are forming an important part of some new research projects.
150. The review found that reporting requirements are generally adhered to, at least in the formal sense. For nearly all of the projects examined, activity and financial reports had been provided on at least an annual basis. However, there was no common format for these reports, which are prepared by the implementing partner to varying standards. Although nearly all of the activity reports contained evidence that at least some of the output indicators were being monitored, it was rare to find a systematic review of progress against indicators defined in the credit agreement or logical framework. It was also difficult to discern how SDC had reacted to progress reports and whether management decisions had been taken on the basis of measured results.
151. In general terms SDC appears to have begun to adopt principles of results-based management, but the extent to which these influence research management in practice is still rather limited. Deficiencies in results-based management practices are also highlighted by the questionnaire survey of SDC staff (see Annex 7, table 27). The survey results point to weaknesses in the use of logical frameworks and indicators in project design, and deficiencies in monitoring. The most striking weakness identified by the survey is that SDC managers are not "sufficiently aware of the findings of the monitoring of research activities". Other evaluations and studies have also highlighted shortcomings in results-based management, both in terms of the tools used within SDC, and the staff skills and organisational culture required to support results-based management practices.⁶³

10.5 Evaluation practice

152. SDC appears to make frequent use of evaluations. The review of the project documents for the sample of 20 SDC research projects found that almost two-thirds of the projects had been evaluated externally over the past four years, and 42% of the credit proposals included a provision for an external evaluation at the end of the current funding period. It was not clear, however, on which basis SDC decided whether or not there should be an external evaluation. There is evidence that SDC has often reviewed projects on the basis of the findings of evaluations. For 73% of the projects examined in the document survey there was evidence that changes to the project design had been made (usually between funding phases) as a result of previous evaluations.

⁶¹ NCCR projects in South Asia use logframes but have found it difficult to maintain rigid outcome monitoring, a process which evolves differently in the case of research-based activities (see Annex 8)

⁶² This finding is in line with a recent review of 16 SDC evaluations, which states on page 14 that "Credit applications do not contain the necessary elements (aims, indicators, processes) that enable results to be verified. Reporting within the annual programme is confusing, and continually mixes process indicators with results (output, outcome)." Peter Arnold, "Learning from Evaluations Recurrent findings and recommendations in SDC evaluations (Unofficial translation of a Report on a meta analysis of evaluations in the Controlling Section, DEZA Lern-Forum Evaluationen 2009)

⁶³ Peter Arnold, "Learning from Evaluations ...", op cit. page (13)

153. In addition the large programmes, such as the NCCR North-South and SDC-SNSF Research Partnership Programme, provide their own evaluation structures. For the NCCR North-South the SNSF has mandated an international review panel, which externally evaluates the programme every year and provides brief reports. These are the basis for the SNSF Research Council to approve further phases, and for SDC to contribute to these. The SDC-SNSF Research Partnership Programme also has an evaluation mechanism in place as part of the research proposal.
154. In order to assess the quality of SDC evaluations of its research activities the team has undertaken a review of 21 recent research evaluations. The main results are reported in the paragraphs that follow, and more detailed findings can be found in Annex 6.
155. The review shows that SDC has used primarily external evaluations, which tend to be of higher quality methodologically than internal evaluations and to provide a more critical assessment of the project in question. From the sample, it appears that the SDC head office does not conduct any evaluations itself.
156. The evaluations, as a rule, examined what types of research (applied, basic, sectoral, interdisciplinary, transdisciplinary, etc.) SDC had supported through the project/programme, what types of objectives had been pursued, and the types of outputs that had been produced. A majority of external evaluations provided an assessment of the main users of the research output.
157. In many evaluations, the relevance of the research output for SDC is not examined (or is simply taken for granted). Even if the relevance of the research output for SDC seems self evident, it is usually not discussed whether it is relevant for the Cooperation Office, the head office, or both. Some evaluations highlight problems in feeding research knowledge back into SDC.
158. Most of the evaluations reported on project results, particularly at the output level. However, many evaluations did not include a thorough assessment of the extent to which results-based management had been actively used over the course of the project, and whether indicators had been established and monitored.
159. Another striking finding is that more than half of the evaluations did not touch upon the issue of sustainability of the supported organisation.
160. One of the main deficiencies of evaluations is that they generally did not address the question of how effective SDC's management had been towards the project in question. Many remained silent on basic issues of funding and management, such as whether the project was financed through a mandate or a contribution. Practically no evaluation examined whether or not there was competitive bidding for research funding. SDC's performance was compared to other donors in only 10% of the evaluations reviewed.
161. Minority and gender issues were generally poorly covered in the evaluations. Although gender issues were addressed in almost 40 per cent of the evaluations (in contrast to just under 20 per cent for minority issues), in a number cases, they were merely mentioned in a sentence or two.
162. Very few evaluations explicitly addressed the issue of whether the research is in line with the country's priorities (alignment). In many cases, this is simply taken for granted.
163. It is doubtful that SDC uses its research evaluations to gain an understanding of how its research activities are performing across the organisation.⁶⁴ Evaluations usually only appear to be used in the context of the specific project in question.

⁶⁴ One indicator of this is that SDC does not appear to have an accurate list of research evaluations. Of the 34 evaluations sent to the team for review it was found that only 21 were connected with research

10.6 SDC's working relationships with its research partners

164. The key informant interviews and questionnaire responses indicate that in general terms SDC interacts with its research partners in a correct and businesslike manner. However, there are some clear problems of communication, and the relationship between SDC and the research community in Switzerland has tended to become more distant in recent years. The most common complaint heard during key informant interviews with researchers in Switzerland was that SDC's character has changed from that of an agency with technical expertise (which treated researchers as partners) to an administrator of development cooperation (which treats researchers as contractors). Many researchers stated that there are no longer people in SDC who they can talk to on a substantive level about the issues they work on. There is very little expectation on the part of researchers that SDC will engage with them about their research project beyond communication of an administrative nature. There is even less expectation that SDC will make active use of their research results. Several informants stated that SDC never responds in a substantial way to the progress and activity reports that they are required to submit. Overall the key informant interviews pointed to a common perception amongst Swiss researchers that SDC has lost interest in engaging with the research community, even though funding levels have been maintained.
165. The questionnaire survey asked researchers in Switzerland to rate SDC's performance against other research funders they are familiar with. Against most criteria SDC is viewed as an average, or slightly below average performer. SDC's performance was viewed as being average or slightly above average in the following areas: "providing means to build research capacity", "dealing with research recipients in a timely, predictable and businesslike manner", and "monitoring the progress and results of the research project." SDC's performance was regarded as being below average in relation to: "conducting fair and competitive tendering", "publicising and explaining funding opportunities", "flexibility and openness to funding innovative ideas", and "continuity/building on past results/ achievements". There were two areas where SDC's performance was viewed as being well below average: "publicising research results" and "making use of research results"
166. SDC has developed a strong partnership with the Swiss National Science Foundation for the delivery of the large North-South and West-East research programmes. SNSF is operationally responsible for the management of these programmes, while SDC provides additional funds for use by research partners in developing and transition countries. This arrangement has generally worked well, and has allowed SDC to draw on SNSF's research management competence, to promote development relevant research, and to focus its resources on research capacity building in the South and East, while at the same time encouraging research in Switzerland based on the partnership model. However, the relationship has not been without difficulties. Research funding bodies tend to place most value on high quality research, whereas development agencies are most interested in the development relevance of the research and its contribution to research capacity building in the south and east. There is a recognition on both sides that trade-offs between these objectives are often encountered, and that these need to be better managed. In particular, the complementary expertise of both institutions should be used in a clearer way. On the part of the SDC this requires the more active provision of expertise and guidance on the development relevance of research, and technical aspects of research capacity building in developing and transition countries. SDC's role on the evaluation panels

167. (and its ability to mobilise external reviewers)⁶⁵, in monitoring results, and in broader strategic discussions with SNSF are particularly important in this regard.

10.7 Impact of SDC's reorganisation on research management

168. It is too early to draw firm conclusions on the impact of SDC's reorganisation for research management. The following paragraphs are therefore offered as observations and hypotheses, but their implications for the future of SDC's research activities are very important and warrant discussion.
169. SDC's reorganisation could be beneficial to its research activities in several ways. The drive to bring thematic competences into the geographical divisions could help to strengthen the relevance of SDC's research, and, in particular help stimulate research that is more directly applicable to SDC's operational work. The delegation of resource allocation and management responsibilities to Cooperation Offices may also help to align research activities more closely with the needs of country programmes.⁶⁶
170. Reorganisation also poses some substantial risks. One of the main challenges will be to ensure that the thematic networks are strong enough in terms of their human and financial resources to continue research activities on a meaningful scale. Because the majority of the thematic networks are housed within geographical divisions they will have to make the argument that the funds they request for research is a better use of resources than operational spending in a particular region.⁶⁷ While this could be regarded as a valid test, it is easy to see that such arguments will be lost by default given the risks and long time scales associated with research funding, as well as the problems of attributing impact to research. The thematic networks located within the Global Cooperation Department are in a more privileged position because their global mandate is clear and they do not have to compete with geographical spending. However, there are other important networks with a clear global focus, and where SDC has a strong tradition, such as health, that do not enjoy this status.
171. Similar problems are also likely to arise within Cooperation Offices. Where the pressure is to disburse funds, achieve visibility, and demonstrate a rapid impact, it is not clear that research funding will be afforded much priority. Devolution of spending power to Cooperation Offices is also likely to reduce interest in funding research projects with cross-border, regional or global relevance.⁶⁸

10.8 Comparison of SDC's management practices with other research donors

172. A review of other donor experience shows that there is a wide range of bureaucratic models. No single model emerges as best practice. Indeed all agencies appear to be facing choices similar to those facing SDC, and many are either currently reforming their systems for supporting research, or have recently done so.
173. In contrast to practice at SDC, most development agencies do operate specific budgets for research. DFID, for example, has reorganised its management of research so as to

⁶⁵ One obstacle to finding qualified experts to sit on development research peer review panels in Switzerland is the low rate of payment for this activity. There is a different culture of payment between the world of development aid and research. Whereas researchers devote their time to panels and evaluations for almost symbolic sums, the consultants used to working on the development relevant issues are professionals who require a full reimbursement of their costs

⁶⁶ However, the case studies described in Annex 8 suggest that the Cooperation Offices are often sceptical of the value of some of the current research supported by SDC's head office

⁶⁷ For example, because the focal point for the health thematic network is located within the Eastern and Southern Africa Division any request for a research project on a global health issue would presumably have to compete with funding for development cooperation programmes in East and Southern Africa

⁶⁸ The case studies described in Annex 8 also suggest that some country offices have not yet undertaken an analysis of what research they need to implement their country strategy

bring a number of separate research funding mechanisms into a single budget administered by a central research group. However, they continue to exclude some research-like activities from the research budget, most importantly the studies that DFID commissions from researchers or consultants to meet its own internal knowledge needs.

174. While the general practice is to maintain a research budget, there are some exceptions, such as USAID, which no longer has a research budget, and like SDC incorporates research activities and funding into wider programming and budget processes. USAID has a similar instrument to SDC's Research Master Plan, (called the USAID Research Agenda), which sets priorities and is intended to establish research as an integral component of programme budgets.⁶⁹
175. Many other donors have established well defined central structures and processes for establishing research priorities that contrast with the rather devolved and diffuse approach adopted by SDC. For example, USAID's research agenda is developed and approved by the "Agency Research Council". The Council ensures overall compliance through periodic reviews of the Agency's research portfolio. These reviews examine the priorities, results and investments made within each strategic area using external groups as necessary.
176. Other agencies have also convened research advisory and governance groups. The most long-standing has been The Netherlands Development Assistance Research Committee (RAWOO), but this now appears to be defunct. Its principal tasks were to issue recommendations regarding research priorities, to put forward proposals for long-term research programmes, and to foster communication among interested parties including end users of research in the north and south. The committee had 15 council members, of which six were from developing countries. There were also three additional "advisors" representing the three Dutch sponsoring ministries (aid, education and agriculture).
177. One of the main drivers of reform within development agencies has been the pressure to reduce the administrative burden of running research programmes effectively. An extreme response is to set up a separate research funding body outside of the development agency. This approach was followed in Canada with the establishment of International Development Research Centre that is separate from the main international development agency, CIDA. The IDRC is often seen as an example of good practice for research funding, but the experience has shown that the approach does not necessarily cut down on administrative costs. IDRC spends approximately 18% of its total budget on so-called "operational activities" (mainly technical assistance to researchers), and a further 22% on overheads and tightly defined administrative costs.⁷⁰
178. In the recent past Sweden followed a similar model where development research (undertaken by SAREC) was separated from development cooperation (undertaken by SIDA). However, the recent reform has in effect brought SAREC inside SIDA. The focus of research is now decided by a Research Council appointed by the Government, which is advised by a research committee who examine SIDA's project and policy proposals.
179. Another approach to reducing the administrative cost of research management has been to limit the number of projects and to increase the size of each grant. However, there are limitations to this approach because large grants can exceed the capacity of

⁶⁹ USAID Research: Policy Framework, Principles and Operational Guidance, 2001, page 16

⁷⁰ Cited in the DFID Research For Poverty Reduction: DFID Research Policy Paper, 2002. Page 37.

Management costs as a proportion of total expenditure supporting research are difficult to obtain but the Ford Foundation is believed to spend between 7 and 12% on managing its research. In the case of the SDC supported NCCR North-South programme the cost of administration would appear to be at least 6%

recipients to utilise them effectively. Some donors are also concentrating their support to research on fewer countries and on specific themes. The Swedish government, for instance, has prioritised research cooperation with seven countries and in relation to four topics.

180. DFID has developed a research programme consortia model that would appear to be motivated in part by a need to spend more money on research without adding to internal administrative costs. They provide substantial funding for large, interdisciplinary bodies with enough flexibility to respond to new research priorities and demands as the programme evolves. On the basis of a competitive tendering procedure, consortia are currently awarded £7.5 million (CHF12.5 million) over six years, including an inception phase of up to one year.⁷¹
181. Development research donors have also struggled with the question of how to ensure the uptake of research findings. In its new research strategy DFID commits itself to “develop systems that allow us to learn from our own research and from other people’s”. They also commit themselves to playing a role in making sure that the research delivers a development impact rather than assuming researchers will attend to this. DFID requires that at least 10% of its research programme consortia budgets are invested in research communication and encouraging people to use research findings.

⁷¹ At 2.08m CHF per year this is about a quarter of the cost of NCCR North South Taking into account all contributions from SDC, SNSF and the participating institutions, the NCCR North-South has a budget of about 8m CHF per year, of which SDC’s contribution is 3.5m CHF per year (2001-2013)

11. Communicating, utilising and learning from research

182. This section assesses the links between research and knowledge management within SDC. It addresses the following questions:

- What is the level of awareness and internalisation of research findings within SDC?
- To what extent does SDC make use of research findings in its operational programmes and policy dialogue?
- To what extent does SDC communicate research results externally?
- What has been the impact of SDC's reorganisation on making use of research findings?
- How does SDC compare with other donors in terms of the links between research and knowledge management?

11.1 Awareness and internalisation of research findings within SDC

183. The questionnaire survey covering SDC staff reveals a rather limited awareness and utilisation of the results of SDC funded research. Half of respondents stated that they were rarely or never made aware of research results. A similar proportion reported that they can access few or no results for SDC funded research work (annex 7 questions 21 and 22).

184. These findings reflect the weakness of SDC's Knowledge Management systems as documented in the recent Knowledge Management evaluation. This concludes that SDC makes rather limited use of the many tools for knowledge management that already exist within SDC (page 16), and that knowledge is transferred mainly through the interaction of individuals (p 31).⁷²

11.2 SDC's use of research findings in its operational programmes and policy dialogue

185. As discussed in Section 9.3 SDC's utilisation of the results of research that it funds is rather limited. The questionnaire survey also highlights the very weak connection between SDC's research activities and its operations. The survey shows that over 70% of questionnaire respondents in SDC rarely or only occasionally (about once a year) encounter the results of SDC funded research and make limited or no use of research results (Annex 7, Question 23).

186. Researchers in Switzerland share a similarly negative view about SDC's ability to make use of research results. Few questionnaire respondents answered positively to the question asking them whether they believed that the results of their research projects had been actively used by SDC in operations and/or policy discussions (see Annex 7, table 48). In comparison to the performance of other donors Swiss researchers also gave SDC a particularly low score for 'making use of research results' (see Annex 7, table 49)

187. The meta-evaluation found that some 15% of the evaluations indicated that use was made of the results research in SDC's head office, and 24% by the SDC country offices.

188. The limited utilisation of the results of SDC funded research in its operations is partly explained by the type of research that it funds. As discussed in section 8.5 SDC rarely commissions research that is directly related to its own operational needs.

⁷² SDC Evaluation 2009/2: Knowledge Management and Institutional Learning in SDC
http://www.sdc.admin.ch/en/Home/Activities/Evaluation/Completed_evaluations/ressources/resource_en_178861.pdf

11.3 Communicating research results externally

189. Under existing arrangements SDC regards the task of communicating research results as being the responsibility of the recipient of the SDC grant. However, for a few mandates it has published research results in the form of an SDC publication.⁷³ SDC does not have a central searchable data base containing research outputs. Although a search function has recently been added to the Intraweb (June 2008), documents reporting research results are not systematically added to the system.
190. KFPE has played a role in publicising the results of SDC supported research, for example its recent publication of 12 success stories for research partnerships.⁷⁴ The same is true of the SNSF in relation to SCOPES.⁷⁵

11.4 Impact of SDC's reorganisation on making use of research findings

191. Many of the effects of SDC's reorganisation discussed earlier in section 10.7 have the potential to strengthen or weaken SDC's use of research results. One of the most important questions concerns the extent to which the thematic networks will be able to draw on research results commissioned by SDC or other funders, and develop connections to the research community, which is an important knowledge repository. The gender network provides an interesting model in this regard having established several resource centres (IHEID, IZFG and IDS Bridge) which provides a direct link to researchers, and ready access to expertise, backstopping and latest research results.
192. One additional issue specific to SDC's research utilisation is the decision made during the reorganisation to locate the research desk and knowledge management within different divisions. It is difficult to see how the present structure will be helpful to ensuring that the findings of SDC funded research are fed into SDC's knowledge management systems.

11.5 How does SDC compare with other donors in terms of the linking research and knowledge management?

193. The evaluation team is not aware of any study that reviews knowledge management systems of research donors. Many donors support research as an international public good and, like SDC, do not necessarily finance research with a view to informing their own staff and operations. However there is a rapidly growing literature on how research can influence the policy process more effectively.⁷⁶
194. In terms of specific initiatives in knowledge management over many years IDRC has invested heavily in a Digital Library that provides the international research community with access to a current and comprehensive collection of research results and documents generated by IDRC-funded projects, IDRC funding recipients, and IDRC staff about a wide range of subjects related to international development.⁷⁷

⁷³ See for example « Les effets économiques de l'aide publique au développement en Suisse », SDC 2006. This publication arose from a research mandate awarded IHEID in Geneva
http://www.sdc.admin.ch/ressources/resource_fr_168704.pdf

⁷⁴ Gemeinsam zum Erfolg, Was Forschungspartnerschaften mit Entwicklungsländern bewirken, KFPE/scnat 2009, http://www.kfpe.ch/key_activities/publications/index.php

⁷⁵ Scientific co-operation with Eastern Europe A Swiss contribution to the countries in transition Experiences and results Published jointly by SNSF and SDC, 2005

⁷⁶ For instance the Research and Policy in Development (RAPID) programme at ODI works with partners in developing and developed countries at the intersection of research, policy and practice to ensure better outcomes for the poor. <http://www.odi.org.uk/programmes/rapid/>

⁷⁷ <https://idl-bnc.idrc.ca/dspace/>

195. More recently DFID has contracted out the task of creating a free access on-line database containing information about research programmes supported by DFID. This is known as R4D (Research for Development) and the latest information about research funded by DFID, including news, case studies and details of current and past research in over 20,000 project and document records.⁷⁸

⁷⁸ <http://www.research4development.info/>

12. Synthesis

196. This evaluation has brought together a wide body of evidence on SDC's performance in supporting research for development. The picture is complex: in some ways reassuring and in others disconcerting. There is a sense that SDC has a good record in supporting research, but also a recognition that the present situation is unsatisfactory and that SDC will need to adapt its approach to reflect a changing context. This section attempts to make sense of this complex picture first by providing a core narrative on what is going well and what is not going well, and what needs to change.
197. Overall this evaluation takes a rather positive view of the research activities that SDC has funded in the past. SDC has a proud record of supporting effective and relevant research. While SDC has spent only a modest share of its research funds in Switzerland, it has succeeded in stimulating a vibrant development research community that has demonstrated its ability to undertake high quality and relevant research. Strong capacity and critical mass appears to have been achieved in several areas, including environmental science, agriculture, water and sanitation and health systems, as well as across several social science disciplines. SDC has made a serious investment in building research capacity in developing and transition countries, in particular through promising North-South, West-East research partnership models that appear to be strongly appreciated by all parties. SDC has also helped to develop some commendable models for research programme management, as well as an effective joint funding mechanism with the Swiss National Science Foundation.

In spite of this positive record, there is a strong sense of dissatisfaction with SDC's present approach to funding research. The research community in Switzerland points to a loss of technical competence in SDC and a loss of interest in research as an instrument of development. Within SDC there is increasing questioning of the benefits of funding research, and criticism of a portfolio that has become fragmented, unmanageable, overly affected by personal and political interests, insufficiently exposed to competition and impossible to monitor due to the weakness of information systems. The good intentions of SDC's many excellent research policy statements are let down by weak management practices that prevent research activities being harnessed most effectively in support of SDC's strategic goals. There is a particular disconnect between SDC's investment in research and the use of research findings at the operational level. While there are many individuals in SDC who remain very interested and committed in the subject, there is a sense that research for development has become a rather sideline issue. Research funding, while substantial, is well below the target that was set in 2002 of spending 6% of SDC's budget on R&D. Research management functions appear to be badly under-resourced to the extent that it will be very difficult to improve and demonstrate the performance of SDC's research activities, and to establish their place more firmly within the organisation.

The concerns raised by this evaluation point to the need for a fresh approach. Business as usual is not an option, in particular because the context for SDC's research funding is changing fundamentally. SDC's reorganisation raises serious questions about whether and in what form research will be required in the new structure. Other developments in the domestic political context, such as the closer relationship between SDC and the Federal Ministry of Foreign Affairs and the Swiss Foreign Policy for Science create further pressure for change. Finally, rapid change in the international development and aid context mean SDC will need to embrace new themes and funding modalities.

SDC's ability to embrace these changes will depend on it having a strong research function to scan the horizon for new issues and to determine how the agency should respond.

The major question facing SDC is therefore not whether it needs to change its approach to research, but how it should change its approach. In reshaping future policy and practice there are numerous issues and options to consider. These are discussed in part three of the report.

Part 3 – Looking Forwards

13. Conclusions and Priorities for Change

The following six sub-sections draw together in bullet form the main conclusions of the evaluation, and then set out the evaluators' view of what needs to change. It was stressed by Corporate Controlling Division that the evaluation should not prejudge or pre-empt the decisions that SDC management will take in relation to future research policy. The report therefore does not make firm recommendations on the future policy stance and orientation of the research portfolio, which is essentially a political decision.⁷⁹ Its main purpose is to inform this decision making by setting out the evidence base, identifying the strengths and weaknesses of SDC's research activities, and highlighting the factors that will need to change in order to achieve greater effectiveness. The following six subsections thus review the findings from each of the evidence chapters of the report (chapters 7-11), and then states the consultants' judgement on the main policy and management changes that will be required. The Core Learning Partnership will take this as the starting point for the Agreement at Completion Point workshop to be held on 2-3 December, which will develop options and recommendations for consideration by SDC senior management.

Conclusions relating to the conceptual and policy framework

Summary of main findings

SDC policy intentions are generally sound but there are probably too many policy statements with little sense of their relative importance (paragraph 45).

The Research Master Plan provides a coherent statement of priorities, but is too much of an ex post justification of what is already being done rather than a prospective plan of what needs to be achieved (paragraph 46).

SDC's role within the Swiss Foreign Policy for Science is not yet clear (paragraph 44).

There is no common institutional view of what constitutes 'research', its role and importance to SDC (paragraphs 47 and 0). Consequently there is little clarity in the types of the results SDC is seeking from its investment in research.

In addition to the stated objectives, support to research in the past has also been justified in terms of:

- enhancing SDC's credibility in, and ability to contribute to, international negotiations in areas of major concern to Switzerland such as water, climate etc (paragraphs 37 and 0).
- Achieving political objectives within Switzerland in terms of building a local constituency for development, and demonstrating an equitable allocation of resources to research institutions covering different sectoral interests, and regional/language areas in Switzerland (paragraph 90). In the view of the evaluators, SDC has been too attached to this logic in the past.

Practical guidance is lacking on how to implement SDC's research policy and principles (paragraph 45).

SDC lacks a clear conceptual framework linking "support to research" to the strategic goals of SDC (paragraph 47), and explaining how investment in research is expected to lead to

⁷⁹ Inception Report, 15th July 2009

development. This does not mean that all supported research must meet the operational needs of SDC's operational programmes, but it does mean that any investment in research should be justified in terms of its contribution to one or more of SDC's strategic goals.

The models of change (or underlying logic) associated with research are specified only in the most rudimentary and often implicit way. There is limited understanding of how research investment operates through various linkages to achieve desired outcomes (paragraphs 48 and 93). In particular SDC needs to explain more clearly:

- what research-related capacity building is meant to achieve and how to achieve it (paragraph 115).
- how research is expected to help SDC operations (paragraph 185).
- what is the logic behind funding multilateral research organisations (including the CGIAR, paragraphs 0 and 128), including a fuller discussion of how SDC can most effectively deliver global public goods benefits through this mode of funding.

Evaluation team judgement on what needs to change:

SDC needs to reach a clearer vision on whether and how to support research. There needs to be a revised policy statement with clear status and applicability across SDC.

In revising its policy SDC needs to take greater account of the changing context for development research.

SDC needs to define different types of research in terms its strategic objectives, and develop more explicit models of change explaining the logic of different types of research and how they contribute to SDC's objectives.

SDC should develop an explicit policy statement explaining how the agency wishes to engage with Swiss research institutions and identifying their respective roles as partners in promoting international development.

SDC needs to assign responsibility for research policy and its implementation to a suitably high level (e.g. appointment of a chief scientist, or chair of an SDC scientific committee).

SDC needs to develop a policy on how to apply the Paris Principles to research policy (i.e. coordination and harmonisation, alignment with national priorities).

The Research Master Plan (Forschungskonzept) needs to become more meaningful as a prospective strategic planning mechanism.

Conclusions for Portfolio Management

Summary of main findings

SDC does not manage its research as a single portfolio (paragraph 135). SDC therefore lacks an overall view of what it is funding (paragraph 138), and the policy levers to steer the portfolio in a particular direction (paragraph 139).

A large proportion (around 50%) of SDC's support to research is not explicitly aimed at meeting SDC's operational requirements, and is largely in the form of contributions to programmes whose objectives and management are outside SDC's direct influence or responsibility (paragraphs 59, 83, 109 and following). However, there has been increasing use of soft earmarking, which provides SDC with a little more influence over the way its contributions are used (paragraph 82).

SDC generally acts in a responsive rather than directive mode in supporting research (paragraph 137). Historically SDC's preference has been for informal resource allocation arrangements and the delegation of responsibility to the individual staff members' interests and enthusiasm. This has resulted in some success at the level of individual investments but insufficient strategic rationality in allocation of resources (paragraph 92).

SDC Research Policies were operationalised only to a limited extent (paragraphs 135 and 137). The target of allocating 6% of the SDC budget to support research has not been met (paragraph 55).

The portfolio is overly fragmented with too many individual activities (paragraph 137), and lacks critical mass of effort (paragraph 77). To some extent this reflects the "different logics" of different types of research activities and the need to respond flexibly to country needs (paragraph 136). However, in spite of these benefits the evaluators consider that the level of fragmentation acts as a net harm, making it very difficult for management to take an overall view of what research SDC is funding (paragraph 137).

The portfolio is managed in an incremental way with changes only occurring at the margin through the addition of new projects and closure of old projects (paragraph 139). There is no attempt to review the portfolio in a comprehensive manner.

There are shortcomings in the way that SDC has used the ARAMIS database as an information and portfolio management tool (paragraph 138). A critical deficiency is that ARAMIS entries have not been based on an agreed definition of research, and SDC has not developed codes to describe the various research subtypes (Box 2).

SDC's instruments to support research are not clearly defined in terms of their different logics and models of change (paragraph 64).

The share of SDC's research funding that is spent on research projects based in Switzerland is approximately 25% (paragraph 64). This is lower than many people in SDC thought and is lower than the overall proportion of Swiss official development assistance spent directly on goods and services in Switzerland (50%). The evaluators consider that this share is not excessive, but given SDC's wider goals and commitment to using ODA in developing and southern countries there is no scope to increase it (paragraph 68). Instead SDC should focus on its largely successful model of using its research funds to lever in other sources of research money for Swiss researchers.

SDC's leveraging model has implications for the extent to which SDC can reasonably exert influence over the content, process and output of the research it supports (paragraphs 59 and 88). However, the firm conclusion of the evaluation team is that research expenditure managed under jointly managed North-South programmes have more convincingly demonstrated their results than research contributions and mandates managed solely by SDC.

SDC is not sufficiently active as a research actor at the EU level (paragraph 70).

Contributions to multilateral research organisation are not subject to regular review to determine that they remain the best use of SDC resources. (CGIAR, paragraphs 0, 0 and 128). This applies to decisions both about the optimal multilateral/ bilateral allocation of research spending, and research spending decisions within the multilateral programme.

Evaluation team judgement on what needs to change:

SDC needs to view its research activities more in terms of a portfolio, in order to ensure strategic direction, to maximise the contribution of research to SDC's broader objectives, and to ensure lesson learning and synergies between research activities.

SDC needs to simplify the portfolio by reducing the total number of actions and making greater use of research programmes rather than individual projects.

SDC needs to improve the use of information systems to enable senior management to obtain a strategic view of the research portfolio.

SDC should adopt a more rules based and institutional approach to funding decisions based on transparent criteria and SDC's broader strategic objectives. SDC should reduce the extent to which political and personal decisions influence research funding decisions.

SDC should redefine its research funding instruments more clearly in terms of the different objectives of research policy and the different models of change.

SDC should introduce a budget line (or virtual budget) for research.

SDC should commit itself firmly to an explicit spending target for research.

Focus the portfolio more on areas of Swiss research competence.

Conclusions relating to getting results

Summary of main findings

The evaluation found many SDC supported research projects and programmes that had a high reputation and achieved high level of performance at level of individual projects and in relation to the outputs they intended to deliver (paragraph 119 and section 9). Evidence of results was much less clear at the level of outcomes and impact, and it is impossible to discern the total impact of SDC's research funding (paragraphs 94, 99 and 101).

However, it is less clear what SDC wants by way of results. Around half of SDC research funding portfolio is not designed to produce specific results for SDC (paragraphs 83, 109 and 110).

Processes for periodic monitoring and ex-post evaluation do not generally give sufficient emphasis on reporting of results, particularly at the outcome and impact level (paragraph 158). The evidence from chapters 9 and 10 of this evaluation suggest that neither SDC nor the institutions it supports have adequate systems in place for documenting the results achieved (paragraphs 98 and 102). However there are notable exceptions.

The lack of explicit models of change, or diagnoses of the system in which the research takes place means that it is difficult to identify and take proper account of assumptions, risks and bottlenecks, which may explain cases where expected results are not achieved (paragraphs 101).

Outputs are generally adequately documented in project documents, and there is evidence that outputs are often achieved (paragraph 99 and following).

The relevance of research is generally adequately explained in project documents. But relevance needs to be demonstrated in relation to clearly defined models of change (paragraphs 76 and 157).

Documentation on the uptake of research findings was limited and therefore the evaluation found little evidence one way or the other.

Evaluation team judgement on what needs to change:

Systems for results-based management need strengthening in relation to research, and staff skills developed accordingly.

Monitoring and evaluation procedures should be more effectively linked to the models of change underlying each research activity. This should include tracking the intermediate outputs that are often assumed but not tested (such as tracking the subsequent career paths of people trained under capacity building programmes).

An effort needs to be made to establish impact monitoring for at least a sample of projects, by establishing baselines at the start of projects and monitoring change over the duration and after the closure of the project.

There is a need for a more strategic approach to deciding which research projects should be evaluated. Evaluations need to focus more on the quality of SDC management, and outcome and impact monitoring.

Work with other donors to develop best practice for impact assessment and the implementation of results based management in the research sector.

Conclusions relating to research project and programme management

Main findings

SDC's reorganisation presents important opportunities (paragraph 169) and risks (paragraph 170) in relation to research.

Following the reorganisation SDC the role of thematic focal points (paragraph 170) and country programme staff in relation to initiating, managing and allocation of resources for research (paragraph 171) is still not clear. Furthermore, there is widespread perception that the technical competence of SDC staff to engage with researchers has reduced over past 10 years (paragraph 164). There is some potential to fill this gap by enhancing the role of long-term local technical staff in Cooperation offices.

Capacity to monitor progress is reduced following re-organisation. Part of the difficulty arises from the wide diversity of projects and circumstances in which SDC has little control over the process of implementation. SDC's current use of the ARAMIS database and SAP is not adequate for the purpose of managing research projects (paragraph 138).

The research desk is overstretched, and needs support from a more senior level to drive policy and to manage relationships with the directors of other federal agencies and other donors.

SDC has begun to use the language of results-based management, but is not yet implementing it adequately in the area of research (box 1). Credit applications do not contain the necessary elements (aims, indicators, processes) that enable results to be verified (paragraph 148).

Mechanisms for ensuring gender sensitive approaches to research (topics, staff, disaggregated data etc) are currently weak, but improving (paragraph 149 and 161).

The evaluations of research activities are of variable quality. There is no discernable logic as to which projects are evaluated. Evaluations rarely examined the effectiveness of SDC's management of the projects. Impact and outcomes were evaluated in only a minority of cases (Section 10.5).

There is a lack of competition in SDC's award of research funds, although the North-South programmes do include competitive calls for proposals (paragraph 140).

There is evidence that programmes are more effectively managed by SDC and partners than individual mandates.

Evaluation team judgement on what needs to change:

Information systems must be improved to provide information that SDC research managers need, including locating research project documentation in a single electronic repository.

SDC needs to devote greater resources to research management either through additional staff or (competitively tendered) outsourcing.

The research desk needs greater resources, a clearer cross-cutting mandate and involvement of staff at a more senior level.

As part of the reorganisation process the thematic focal points need to be given a more explicit role in terms of initiating, funding and managing research.

As part of the reorganisation process COOFs need to be given a clear role in terms of initiating, funding and managing research.

Research funding needs to be progressively opened up on a more competitive basis and a more EU-wide basis.

Conclusions relating to knowledge management

Main findings

SDC staff were found to be largely unaware of the results of SDC funded research activities, and little use of the research results was made by SDC (paragraph 185).

The communication of research results to the wider audience is currently the responsibility of the researchers, and SDC has not attempted to add value to this (paragraph 189). There is insufficient engagement between SDC staff and the Swiss research community.

SDC has separated its Knowledge Management function from the research desk. This has made it harder for SDC to capitalise on the results of research supported by SDC and other organisations (paragraph 208).

The ARAMIS database as currently used by SDC does not perform well as a tool for an the Management of Knowledge inside and outside of the organisation (paragraphs 138 and 189).

Evaluation team judgement on what needs to change:

Research results need to be better communicated within and outside SDC.

SDC's thematic networks need to draw more effectively on knowledge held by the research community in Switzerland and elsewhere.

Research outputs need to be more accessible through SDC's knowledge management systems. This requires an improved searchable database providing access to research results and identifying where particular research skills are located.

A change in organisational culture is required to encourage staff to make greater use of research based knowledge in their operational work.

SDC should commission more research on policy and operational questions affecting SDC's own work.

Conclusions relating to the Broader Research System**Main findings**

SDC's investment in development research has successfully complemented other sources of research funding, in particular through its participation in North-South (and West-East programmes) (paragraph 88).

However, SDC has done little to encourage private sector research investment, and has not capitalised on private research capacity in Switzerland, particularly in relation to pharmaceuticals (paragraph 96).

The broader research system in which SDC operates is changing rapidly as other federal organisations become involved in supporting research in the South and East. The funding environment is also likely to change as a result of donor commitments to the Paris Declaration on aid effectiveness (paragraph 24).

SDC achieves a high degree of donor harmonisation through support to international research systems, but SDC's ability to promote reform in the international research system is limited (paragraph 127).

SDC has an effective relationship with the SNSF, but the complementary expertise of each organisation could be used in a clearer way. On the part of the SDC this requires the more active provision of expertise and guidance on the development relevance of research, and technical aspects of research capacity building in developing and transition countries.

The KFPE provides an opportunity for the research community in Switzerland to communicate its views to SDC, but this asset would appear to be under utilised by both parties (paragraph 190).

Evaluation team judgement on what needs to change:

SDC needs to work through coordinated partnership mechanisms to harmonise its support to research with other donors. This could include playing a leading role in the International Forum of Research Donors (IFORD) to be held in Switzerland in 2010.

SDC needs to consider how it might work more effectively with the private sector in developing countries in order to stimulate research and innovation.

SDC needs to consider how it can work more strategically with the private sector in Switzerland to stimulate private research on development issues, for example using innovative instruments, such as forward purchase agreements for new vaccines.

SDC needs to invest more in strengthening its relationships with its research co-funders (including more regular high level contact with SNSF, SER), and should more clearly articulate what it expects to contribute to and get out of each partnership.

14. Scenarios

The priorities listed in chapter 13 constitute a long and demanding agenda. In determining a feasible course of action SDC will need to make choices as to how much of this agenda it will seek to cover. Much depends on the view that senior management take on the value of research and the forms of research they wish to support. Depending on the priority that SDC wishes to attach to research there are three basic choices for future research policy. These are described below in the form of three scenarios:

Scenario 1 - Business as usual = less research

The evaluators consider that without policy and management changes SDC's funding for research will dwindle over the next few years because in the new organisational structure there is likely to be less demand from SDC for research (see section 10.7). The most important changes have been the abolition of the thematic department, which had been a major supporter of research, and decentralisation to Cooperation Offices (COOFs). There are greater pressures to deliver results and visibility in the short-term, which may not be compatible with long-term and higher-risk research investment. The new thematic networks could become an important actor, but their role in promoting research and their influence over resource allocation has not yet been made sufficiently clear.

Scenario 2 - Greater quality, same quantity of research

Under this scenario SDC would seek to maintain current levels of spending on research activities (around 3% of SDC's total spending), but would make a major effort to improve the quality of research management and the utilisation of research results within SDC. In order to achieve this SDC will need to make substantial progress in implementing most parts of the change agenda detailed in chapter 13, in particular revision of the research policy, clarification of organisational structures to ensure implementation of the policy, institutionalisation of a Managing for Development Results approach, improvement of information systems for oversight and knowledge management and establishment of mechanisms to maximise the utilisation of research results.

Scenario 3 – Greater quantity, greater quality of research

Under this scenario SDC makes research a greater strategic priority and would increase its research funding to 6% of SDC's total spending. This option would require SDC to embrace all areas of the change agenda detailed in chapter 13 and to ensure complete implementation. In particular, it would require an explicit research spending target, a firm commitment to achieve this, greater participation in international research bodies, and stronger organisational arrangements within SDC including a high level advocate or champion of research linked to much strengthened research management functions.

Good arguments can be made in favour of SDC stepping up its engagement in research that relate SDC's particular characteristics as a small- to medium-sized donor seeking to capitalise on its areas of specialisation, Switzerland's comparative advantage in research and innovation, and broader considerations about the importance of knowledge in the development process. However, much will depend on the political appetite for such a role, as well as practical considerations about SDC's readiness to become more engaged in research funding. If there is a desire to move towards scenario 3 in the medium- to long-term it would be advisable to ensure that the goals of scenario 2 have first been achieved.

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