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A Short History of the KFPE 1994–2019



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This report can be downloaded free of charge from kfpe.scnat.ch/history2020

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'Nu nit lug loh.'*

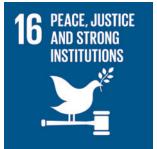
Thierry A. Freyvogel

SDGs: The international UN Sustainable Development Goals

With this report, the Swiss Academies of Arts and Sciences contribute to achieving the SDGs 10, 16 and 17: 'Reduce inequality within and among countries', 'Promote peaceful and inclusive societies for sustainable development' and 'Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development'.

- > sustainabledevelopment.un.org
- > eda. admin. ch/agenda 2030/de/home/agenda 2030/die 17-ziele-fuer-eine-nach haltige-entwicklung. html









































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Preface

For nearly three decades, North–South research partnerships have been recognised not only as a highly efficient approach to global sustainable development – but as a necessity. The quality and capabilities of such partnerships have therefore been promoted by the Commission for Research Partnerships with Developing Countries (KFPE) for more than 25 years.

The United Nations 2030 Agenda made it clear that a transformation towards sustainable development can only be achieved if science – both in the global North and South – provides timely knowledge on future pathways, and enters into a continuous dialogue with policy, civil society, and the private sector. For successful implementation of the 2030 Agenda, there is an urgent need to increase research capacities and to adapt science systems. Low-income countries are particularly challenged in this respect by their density of researchers, which is 50 times lower than that of rich countries. This low density of researchers, coupled with a scarcity of funds and want of science tradition, stands in stark contrast to the urgent need for context-specific knowledge in both the global North and South.

The purpose of this study is to record and preserve the KFPE's history and to make it available to science policy, international cooperation, research funding agencies, and researchers interested in exploiting the potential of transnational research partnerships.

We would like to take the opportunity to thank the past presidents and members of the KFPE who were engaged in promoting fair research partnerships. Special mention and gratitude are extended to Jon-Andri Lys, who for two decades was the person in charge and first point of contact at the KFPE for members and partners at home and abroad.

I hope that this historical perspective on the KFPE's experiences and achievements shows how partnership-based North–South research supports transformation towards sustainable development, in both the global North and South.

Prof. Dr. Thomas Breu President of the KFPE

Executive Summary

The Commission for Research Partnerships with Developing Countries (KFPE) was established at the Swiss Academies of Arts and Sciences (a+)¹ in 1994 to promote research cooperation between low, middle, and high-income countries – referred to in this report as North–South research – and to improve its quality and capability. In the early 1990s, North–South research was recognised as a requirement for global sustainable development, and several industrialised nations intensified their promotion of activities in this area. The present report offers a brief history of the KFPE and describes the commission's main achievements, performance, and impact. The report also sheds light on the broader conditions for the promotion of North–South research in Switzerland over the past quarter century.

The establishment of the KFPE was proposed in the Swiss Strategy for the Promotion of Research in Developing Countries, which was jointly issued in 1993 on behalf of the a+ and the Swiss Agency for Development and Cooperation (SDC). This policy document resulted from concerted efforts by a small working group of committed individuals from the domains of science policy, development policy, and research. The Swiss Academy of Sciences (SCNAT) was instrumental in initiating and coordinating these preparatory activities, which included an international conference and background reports on the state of North–South research.

The KFPE was convened at a time of great transformation in the Swiss science policy, development policy, and research communities. Swiss development policies and activities were being reshaped in the wake of a debt relief programme and the country's signature, in 1992, of the Rio Declaration and Agenda 21. Against this backdrop, the first comprehensive North–South research promotion programme on 'Development and Environment' was launched in 1992 under the Swiss Priority Programme Environment (SPPE Module 7).

After a pilot period of five years and two successful pilot phases, the KFPE was granted the status of a permanent commission under the auspices of a+ in 1999. It has retained this status and its original operational affiliation with the SCNAT to this day. Until 2006, core funds for the KFPE were provided by the four academies of the a+. From 2012, a new funding formula was instituted with

equal contributions by the SCNAT, SDC, and the Swiss National Science Foundation (SNSF), with additional revenue from the membership fees of its associated institutions.

The mission, objectives, and activities of the KFPE have displayed remarkable historical consistency. The commission's historical trajectory was largely conditioned upon the federal circumstances for North-South promotion in Switzerland. These were characterised by three generations of large-scale, temporary research programmes: the SPPE Module 7 (1992-1999), the National Centre of Competence in Research (NCCR) North-South (2001-2013), and the Swiss Programme for Research on Global Issues for Development (r4d programme) (2012-2022). All of these programmes were jointly financed by the SDC and the SNSF and therefore had to address the dual challenge of simultaneously meeting the standards of scientific excellence and developmental relevance. Many of the KFPE's activities have been linked to the lifecycle of these major research programmes.

The KFPE was however also involved in many other initiatives, such as the swissuniversities Development and Cooperation Network (SUDAC), and it administered two highly successful research promotion schemes on behalf of the SDC, Echanges Universitaires and Jeunes Chercheurs. For a decade, these two schemes funded the exchange of early career researchers; their discontinuation in 2011 has left a critical gap in the Swiss national funding landscape for North–South research.

Over the years, the KFPE has built an extensive network of associated institutions and partners. The commission has provided conceptual guidance, expert advice, information, and administrative assistance on a number of systemic challenges for North–South research. Early in its history, the KFPE formulated guidelines for research partnerships with developing countries, which have since formed the conceptual centrepiece for implementing the KFPE's mission. The original and revised versions of the guidelines were referenced, applied, and solicited nationally and internationally and have played an important part in establishing the KFPE's reputation. They furnished the intellectual groundwork for other KFPE projects on critical issues such as research impact and selection criteria for North–South research projects.

The records of the KFPE confirm that the commission has played a significant role in the promotion of North– South research in Switzerland. Its projects have provided

¹ Prior to 2006, the a+ was known as the Council of the Conference of the Swiss Academies (CASS).

incentives and opportunities for collaboration at the intersection of the science policy, development policy, and research communities and other stakeholders. They have fostered research communities that extend across Northern and Southern countries and have attracted early career researchers to North–South issues and problems. The KFPE has mediated between different knowledge claims on problems and has dealt with critical questions of knowledge credibility and legitimacy which typically preoccupy North–South research. Its work has leveraged the standing and reputation of North–South researchers in the Swiss scientific community and internationally.

The KFPE qualifies as a successful boundary organisation (Guston, 1999) at the interface of the science policy, development policy, and research communities. Historical patterns in its boundary objects (Star and Griesemer, 1989) and boundary work (Gieryn, 1983) provide insights into the commission's performance and impact: The KFPE has

- influenced the course and quality of North–South research in Switzerland and beyond;
- generated a high return on investment with relatively minor material, financial, and human resources;
- shaped a new tradition of skills, competences, and expertise to promote North–South research;
- contributed to implementing the goals of global sustainable development since the mid-1990s;
- stood out as a pioneering showpiece for the a+ and the Swiss science policy, development policy, and research communities.

Patterns in the KFPE's boundary objects and boundary work also reveal several features specific to North–South research promotion in Switzerland. These concern this country's particular national model and strategic approach to North–South research promotion, and its federal research policy agenda and science budget.

- The Swiss model of North–South research promotion reflects a stop-and-go federal policy and commitment to North–South research. Three generations of fixed-term, large-scale research programmes have occupied much time and effort of the KFPE as well as its members and associated institutions. Other models were developed and advocated but not supported at the policy level.
- Switzerland's large, temporary North-South research programmes did not originate in strategic federal policy decisions. Switzerland's only federal strategy for North-South research promotion dates back to 1993. The effectiveness of this national strategy is showcased by the historical achievements of the KFPE. National North-South research strategies and action plans to promote North-South research have been on the rise internationally over the past few years. This trend confirms that medium- and long-term achievements in North-South research promotion depend on informed policy decisions, goals, and action plans which, in turn, require strategic guidance.

A look back at the history of the KFPE reveals almost thirty years of concerted efforts to bring North–South research onto the Swiss research policy agenda and science budget. The scientific standing of North–South research in Switzerland has suffered from historical bias as research of lesser quality. A budget category for North–South research is a necessary step to overcome this historical bias, so that the status, quality, and achievements of this spectrum of the Swiss research community can be adequately reflected and its traditions effectively anchored in the national research landscape.

Zusammenfassung

Die Kommission für Forschungspartnerschaften mit Entwicklungsländern (KFPE) wurde im Jahr 1994 an den Akademien der Wissenschaften Schweiz (a+)² gegründet, um die Forschungszusammenarbeit mit Ländern niedrigen und mittleren Einkommens zu fördern. In den frühen 1990er Jahre wurde die Nord-Süd Forschung als Voraussetzung für die globale nachhaltige Entwicklung anerkannt, und die Forschungsförderung von vielen Industrienationen wurden entsprechend ausgebaut. Der vorliegende Bericht liefert einen kurzen historischen Rückblick auf die KFPE und beschreibt ihre wichtigsten Errungenschaften, Leistungen und Wirkungsbereiche. Zudem gibt er Einblick in die Rahmenbedingungen für die Nord-Süd Forschungsförderung in der Schweiz in den letzten fünfundzwanzig Jahren.

Die Gründung der KFPE wurde in einer Schweizer Strategie zur Förderung der Forschung in Entwicklungsländern vorgeschlagen. Diese Strategie wurde im Jahr 1993 gemeinsam von der a+ und der Direktion für Entwicklung und Zusammenarbeit (DEZA) herausgegeben. Die Strategie war das Ergebnis von Bemühungen einer kleinen Arbeitsgruppe mit Vertreter*innen aus der Forschung und der schweizerischen Wissenschafts- und Entwicklungspolitik. Die Vorbereitungsarbeit zur Gründung, an welcher massgeblich die Akademie der Naturwissenschaften Schweiz (SCNAT) beteiligt war, umfassten unter anderem eine internationale Konferenz sowie Hintergrundberichte zum aktuellen Stand der Nord-Süd Forschung.

Die KFPE wurde in einer Zeit einberufen, in der grosse Umbrüche in der schweizerischen Wissenschafts- und Entwicklungspolitik, wie auch in der Forschung stattfanden. Die schweizerische Entwicklungspolitik wurde im Zuge des Entschuldungsprogramms und der Unterzeichnung des Abkommens von Rio und der Agenda 21 von 1992 neu ausgerichtet. Im gleichen Jahr wurde im Rahmen des nationalen Schwerpunktprogramms Umwelt das erste umfassende Nord-Süd-Forschungsförderungsprogramm der Schweiz zum Thema «Entwicklung und Umwelt» eingeführt (SPPU Modul-7).

Nach fünf Jahren und zwei erfolgreichen Pilotphasen wurde die KFPE im Jahr 1999 von der a+ als ständige Kommission aufgenommen und operativ der SCNAT angegliedert. Die KFPE hat diese Anbindung und die operative Zugehörigkeit bis heute beibehalten. Bis zum Jahr 2006 wurde die

KFPE von den vier Akademien der a+ finanziert. Im Jahr 2012 wurde eine neue Finanzierungsformel mit gleichwertigen Beiträgen der SCNAT, der DEZA und des Schweizerischen Nationalfonds (SNF), sowie ergänzenden Mitgliederbeiträgen der assoziierten Institutionen eingeführt.

Die KFPE weist hinsichtlich ihres Auftrags, ihrer Ziele und ihrer Aktivitäten eine bemerkenswerte historische Beständigkeit aus. Die Geschichte der Kommission wurde wesentlich von den nationalen Bedingungen für die Nord-Süd Förderung in der Schweiz beeinflusst, welche von drei Generationen von befristeten Forschungsprogrammen geprägt waren: das SPPU Modul-7 (1992-1999), das Swiss National Centre of Competence in Research North-South (NCCR) (2001-2013), und das Swiss Programme for Research on Global Issues for Development (r4d programme) (2012-2022). Diese Programme wurden alle gemeinsam von der DEZA und dem SNF finanziert. Sie mussten die grosse Herausforderung bewältigen, gleichzeitig die Kriterien der wissenschaftlichen Exzellenz und der entwicklungspolitischen Relevanz zu erfüllen. Viele Aktivitäten der KFPE waren mit den jeweiligen Entwicklungsstadien dieser grossen Forschungsprogramme verknüpft.

Die KFPE war aber auch an vielen weiteren Initiativen, wie beispielsweise dem swissuniversities Development and Cooperation Network (SUDAC), beteiligt. Des Weiteren verwaltete sie im Auftrag der DEZA während zehn Jahren zwei sehr erfolgreiche Forschungsförderungsprogramme, die Jeunes Chercheurs und Echanges Universitaires, welche den Austausch von NachwuchswissenschaftlerInnen förderten. Diese Programme wurden im Jahr 2011 eingestellt und hinterliessen eine kritische Lücke in der nationalen Förderung der Nord-Süd-Forschung.

Über die Jahre hat die KFPE ein ausgedehntes Netzwerk von assoziierten Institutionen und Partnern aufgebaut. Sie hat mit konzeptionellen Leitlinien, fachkundiger Beratung, Informationen und administrativer Unterstützung zur Bewältigung von Herausforderungen in der Nord-Süd Forschung beigetragen. Schon nach wenigen Jahren hat die KFPE einen Leitfaden für Forschungspartnerschaften mit Entwicklungsländern herausgegeben, der auch als Wegleitung für die eigenen Tätigkeiten der KFPE diente. Der Leitfaden hat wesentlich zum nationalen und internationalen Ansehen der KFPE beigetragen und wurde häufig angefordert, zitiert und umgesetzt. Er lieferte auch die Grundlage für viele andere KFPE-Projekte zu wichtigen Herausforderungen der Nord-Süd Forschung, wie zum Beispiel zur Wirkungsmessung und zu den Auswahlkriterien für Forschungsprojekte.

Vor 2006 war die a+ als Konferenz der wissenschaftlichen Akademien der Schweiz (CASS) bekannt.

Historische Aufzeichnungen der KFPE bestätigen, dass die Kommission für die Förderung der Nord-Süd Forschung in der Schweiz eine bedeutende Rolle gespielt hat. Ihre Projekte haben Anreize für die Zusammenarbeit zwischen Wissenschaftspolitik, Entwicklungspolitik, Forschung und anderen Interessengruppen geschaffen. Sie haben globale Nord-Süd Forschungspartnerschaften unterstützt und NachwuchswissenschaftlerInnen für Nord-Süd-Themen und -Probleme begeistert. Die KFPE hat zwischen unterschiedlichen Wissenstraditionen vermittelt und sich kritischer Fragen angenommen, die typischerweise die Nord-Süd Forschung beschäftigen. Durch ihre Aktivitäten hat sie den Status und das Ansehen der Nord-Süd Forscherinnen und Forscher national und international gestärkt.

Die KFPE lässt sich als erfolgreiche boundary organisation (Guston, 1999) an der Schnittstelle von Wissenschaftspolitik, Entwicklungspolitik und Forschungsgemeinschaften einordnen. Die analytischen Konzepte der boundary objects (Star und Griesemer, 1989) und boundary work (Gieryn, 1983) geben weiter Aufschluss zu den Leistungen und Wirkungsbereichen der Kommission. Die KFPE hat:

- den Verlauf und die Qualität der Nord-Süd Forschung im In- und Ausland beeinflusst;
- mit relativ geringen materiellen, finanziellen und personellen Ressourcen hohe Wirkungen erzielt;
- neue Traditionen, Kompetenzen und Fachwissen für die Förderung der Nord-Süd Forschung geprägt;
- seit Mitte der 90er Jahre zur Verwirklichung der Ziele der globalen nachhaltigen Entwicklung beigetragen;
- richtungsweisende Pionierarbeit für die Akademien, die Forschenden sowie die Wissenschafts- und Forschungspolitik geleistet.

Die boundary objects und boundary work der KFPE bringen auch einige Besonderheiten zu Tage, welche die strategische Ausrichtung, Forschungspolitik und Finanzierung

der Nord-Süd Forschungsförderung in der Schweiz gekennzeichnet haben.

- Das Schweizer Modell der Nord-Süd Forschungsförderung war bisher gezeichnet von einer nationalen «Stopand-Go» Politik und zeitlich begrenzten Verpflichtungen gegenüber der Nord-Süd Forschung. Das führte dazu, dass die drei zeitlich befristeten, gross angelegten Nord-Süd Forschungsprogramme der Schweiz der KFPE, ihren Mitgliedern und assoziierten Institutionen viel Zeit und Mühe abverlangt haben. Andere, kontinuierlichere Modelle, die erarbeitet und zur Umsetzung vorgelegt wurden, fanden auf politischer Ebene wenig Unterstützung.
- Die umfangreichen, befristeten Nord-Süd Forschungsprogramme der Schweiz wurden nicht durch strategische forschungspolitische Entscheidungen veranlasst. Bisher wurde erst eine nationale Strategie der Schweiz für die Förderung der Nord-Süd Forschung erarbeitet (1993). Die Geschichte der KFPE veranschaulicht die Wirksamkeit dieser nationalen Strategie. Auf internationaler Ebene wurden in den letzten Jahren vermehrt nationale Strategien und Aktionspläne zur Förderung der Nord-Süd Forschung entwickelt. Dieser Trend bestätigt, dass mittel- und langfristige Erfolge in der Förderung der Nord-Süd Forschung von politischen Entscheidungen, Zielen und Aktionsplänen abhängen, die ihrerseits nationale strategische Richtlinien bedingen.

Der historische Rückblick auf die KFPE zeigt auf, dass die Bemühungen, die Nord-Süd Forschung in die schweizerische Forschungspolitik und den Staatshaushalt für Bildung, Forschung und Innovation einzubringen, mittlerweile fast dreissig Jahre andauern. Die Nord-Süd Forschung in der Schweiz leidet unter historischen Vorurteilen und wird als qualitativ minderwertig angesehen. Eine eigenständige Budgetkategorie für die Nord-Süd Forschung wäre ein notwendiger Schritt, um diese historischen Vorurteile zu überwinden und ihren Status, ihre Qualität und Leistungen angemessen anzuerkennen und in der nationalen Forschungslandschaft zu verankern.

Résumé

La Commission pour le partenariat scientifique avec les pays en développement (KFPE) a été créée aux Académies suisses des sciences (a+)³ en 1994, afin de promouvoir la coopération dans la recherche avec les pays à revenus faibles et intermédiaires et afin d'améliorer la qualité et les compétences de la recherche Nord-Sud.⁴ Au début des années 1990, la recherche Nord-Sud a été reconnue comme un prérequis du développement durable global. Ainsi, plusieurs nations industrialisées ont intensifié leurs activités de promotion de la recherche dans ce domaine. Le rapport ci-dessous propose un aperçu de la KPFE; il en décrit les principales réalisations, les performances et les impacts. Le document offre aussi un aperçu des conditions plus générales de la promotion de la recherche Nord-Sud en Suisse de ces vingt-cinq dernières années.

La création de la KFPE a été proposée dans le cadre de la Stratégie Suisse pour la promotion de la recherche dans les pays en développement (Swiss Strategy for the Promotion of Research in Developing Countries), qui a été élaborée conjointement en 1993 entre a+ et la Direction Suisse du développement et de la coopération (DDC). Ce document politique est le résultat d'efforts de concertation d'un petit groupe de travail de personnes engagées de la communauté des politiques des sciences, du développement et des communautés de recherche suisses. L'Académie suisse des sciences naturelles (SCNAT) a été l'instrument de mise en œuvre et de coordination de ces travaux préparatoires qui comprenaient une conférence internationale et des rapports de synthèse sur l'état de la recherche Nord-Sud.

La KFPE a été créé dans une période de mutations importantes au sein des politiques des sciences et du développement et des communautés de recherche suisses. Après un important programme d'aide et de la signature par la Suisse de la Déclaration de Rio et de l'Agenda 21 de 1992, les politiques et activités suisses de développement furent redéfinies. Dans ce contexte, le premier programme complet de promotion de la recherche Nord-Sud sur le « Développement et l'environnement » a été lancé en 1992 sous l'égide du Programme prioritaire suisse environnement (SPPE Module 7).

Après une période d'essai de cinq ans et deux phases pilotes réussies, la KPFE a reçu le statut de commission permanente, sous les auspices de a+, en 1999. Jusqu'à ce jour, il a conservé ce statut et son affiliation opérationnelle d'origine avec la SCNAT. Jusqu'en 2006, les principaux fonds de la KFPE provenaient des quatre académies de a+. A partir de 2012, une nouvelle formule de financement a été instaurée, avec des contributions égales de la SCNAT, de la DDC et du Fonds national suisse de la recherche scientifique (FNS) ainsi que des revenus complémentaires des cotisations des institutions associées.

La mission, les objectifs et les activités de la KFPE montrent une cohérence historique remarquable. L'évolution historique de la commission a été largement déterminée par les conditions générales de la promotion fédérale de la recherche Nord-Sud en Suisse. Elles étaient caractérisées par trois générations de programmes de recherche temporaires à grande échelle : le Module 7 SPPE (1992-1999), le National Centres of Competence in Research (NCCR) Nord-Sud (2001-2013), et le Swiss Programme for Research on Global Issues for Development (r4d programme) (2012-2022). Tous ces programmes ont été financés conjointement par la DDC et le FNS et ont par conséquent dû relever le défi d'être à la hauteur à la fois des critères d'excellence scientifique et de la pertinence du développement. Nombre des activités de la KFPE ont été liées au cycle de vie de ces programmes de recherche majeurs.

Cependant, la commission s'est aussi impliquée dans de nombreuses autres initiatives comme le swissuniversities Development and Cooperation Network (SUDAC). Elle a aussi administré deux schémas de promotion de recherche couronnés de succès pour le compte de la DDC, Jeunes Chercheurs et Echanges Universitaires. Pendant une décennie, ces deux schémas ont permis de financer des échanges de chercheurs en début de carrière; leur interruption en 2011 a créé une brèche majeure dans le paysage suisse des financements pour la recherche Nord-Sud.

Au fil des années, la KFPE a tissé un réseau étendu d'institutions associées et de partenaires. La commission a fourni l'orientation conceptuelle, l'expertise, l'information et l'assistance administrative pour un certain nombre de défis systémiques de la recherche Nord-Sud. Peu après sa création, la KFPE a formulé des lignes directrices pour les partenariats de recherche avec les pays en développement. Ces lignes directrices constituent la cheville ouvrière conceptuelle de la mission de la KPFE. Les versions d'origine, puis révisées, des lignes directrices ont été référencées, appliquées et sollicitées au plan national et international; elles ont joué un rôle important dans la

³ Avant 2006, a+ était connu sous le nom de Conseil des académies suisses des sciences (CASS).

⁴ Dans ce rapport, la coopération sur la recherche entre pays à revenus faibles, intermédiaires et élevés est dénommée « recherche Nord-Sud »

mise en place de la notoriété de la KFPE. Elles ont fourni le fondement intellectuel pour d'autres de ses projets concernant des questions essentielles telles que l'impact de la recherche et les critères de sélection des projets de recherche Nord-Sud.

Les annales de la KFPE montrent que la commission a joué un rôle important dans la promotion de la recherche Nord-Sud en Suisse. Ses projets ont fourni des incitations et des opportunités pour une collaboration qui se situe à la croisée des chemins entre politiques scientifiques, politiques de développement et communautés investies dans la politique de recherche ainsi que d'autres parties-prenantes. Ils ont soutenu des communautés de chercheurs dans les pays du Nord comme du Sud et ont attiré des chercheurs en début de carrière vers les questions et problématiques Nord-Sud. La KFPE a joué le rôle de médiateur entre différentes revendications de connaissances sur des problématiques et a su gérer des questions critiques de crédibilité et de légitimité des connaissances qui préoccupent régulièrement la recherche Nord-Sud. Le travail entrepris a permis de renforcer le statut et la réputation des chercheurs Nord-Sud dans la communauté scientifique suisse et internationale.

La KFPE peut être considérée comme une organisation-frontière (boundary organisation) (Guston, 1999) efficace, se positionnant à l'interface entre politiques scientifiques et de développement et communautés de chercheurs. Les modèles historiques de la commission en matière d'objets-frontière (boundary objects) (Star and Griesemer, 1989) et de travail-frontière ou à l'interface (boundary work) (Gieryn, 1983) donnent un aperçu de ses performances et de son impact. La KFPE a

- influencé la trajectoire et la qualité de la recherche Nord-Sud en Suisse et au-delà;
- généré un fort retour sur investissement des ressources matérielles, financières et humaines relativement limitées;
- façonné une nouvelle tradition de connaissances, de compétences et d'expertise pour promouvoir la recherche Nord-Sud;
- contribué à mettre en œuvre les objectifs mondiaux du développement durable depuis le milieu des années 1990;

 s'est imposée en tant que modèle pionnier pour le a+ et les communautés scientifiques, de développement et de recherche suisses.

Les modèles présents dans les objets-frontière et le travail-frontière de la KPFE révèlent aussi plusieurs particularités de la promotion de la recherche Nord-Sud en Suisse, notamment le modèle national et l'approche stratégique particuliers du pays pour la promotion de la recherche Nord-Sud ainsi que son agenda fédéral de politique et de budget pour la recherche et la science.

- Le modèle Suisse de promotion de la recherche reflète une politique fédérale du « stop and go » et un engagement limité dans le temps dans la recherche Nord-Sud. Trois générations de programmes de recherche à grande échelle ont demandé beaucoup de temps et d'efforts à la KPFE, à ses membres et aux institutions partenaires. D'autres modèles ont été développés et présentés, mais n'ont pas été soutenus au niveau politique.
- Ce ne sont pas des décisions de stratégie politique fédérale qui ont engendré les programmes vastes mais temporaires de recherche Nord-Sud de la Suisse. La seule stratégie fédérale de la Suisse pour la promotion de la recherche Nord-Sud remonte à 1993. L'efficacité de cette stratégie nationale se reflète dans les résultats historiques de la KFPE. Au plan international, les stratégies de recherche et les plans d'action nationaux de promotion de la recherche Nord-Sud ont pris de l'importance, ces dernières années. Cette tendance confirme que les résultats à moyen et long terme de promotion de la recherche Nord-Sud dépendent de décisions politiques, d'objectifs et de plans d'actions éclairés qui, à leur tour, nécessitent une orientation stratégique.

Les rapports historiques sur la KFPE éclairent sur quelque trente années d'efforts concertés pour intégrer la recherche Nord-Sud dans l'agenda politique Suisse de la recherche et dans son budget de la science. La réputation scientifique de la recherche Nord-Sud en Suisse a souffert d'un préjugé historique la taxant de recherche de moindre qualité. La recherche Nord-Sud a besoin qu'un poste budgétaire lui soit dédié pour surmonter ce préjugé histoire et afin que le statut, la qualité et les résultats de cette catégorie de la communauté de recherche Suisse soit adéquatement représentée et que sa tradition puisse véritablement s'ancrer dans le paysage de la recherche nationale.

1. Introduction

The Swiss Commission for Research Partnerships with Developing Countries (KFPE) recently celebrated its 25th anniversary. This milestone affords us the opportunity to look back on – and take stock of – the commission's experiences, as they may hold important lessons for the future.

The key business of the KFPE⁵ has been to promote the quality and capabilities of research partnerships between low, middle, and high-income countries. As simple as this may sound, it is a formidable task. Promoting the quality of North–South research requires dealing with a dividing line that has structured the global political economy of science for more than half a century. In this political geography, low and middle-income countries are considered in need of applied research while wealthy countries, in contrast, occupy the frontiers of basic research. By implication, the former is considered of lower scientific quality than the latter. This simplistic classification has long been refuted by empirical and theoretical studies, but the dividing line persists.

North–South research partnerships are widely recognised as essential to addressing the many challenges of global sustainable development. Climate crises, pandemics, migration, depletion of natural resources, or loss of biodiversity all require concerted scientific efforts and collaboration with actors in governments, institutions, agencies, the private sector, and civil society (UN, 2019). However, for a long time, this recognition did not flow into the research agendas and science budgets of Northern nations. Instead, North–South research was typically channelled through development cooperation and foreign policy budgets.

Historically, national science policies have used a country's desire for economic and scientific competitiveness to argue for spending money on research. Under this rationale, the principal purpose of science, research, and

innovation is to contribute to the economic prosperity of nation-states. Their contribution to addressing global problems is often reduced to cross-cutting issues and typically had no budget category of its own. Accordingly, indicators such as publication counts and patents are applied to measure the quality of the research and the return on public investments into science and research. The quality and significance of North–South research is not reflected in such indicators. While some selected countries have started changing these general terms, the problem persists and the promotion of North–South research for sustainable development remains a critical issue.

Since 1992, when the Rio Declaration and Agenda 21 called out the need to change the global asymmetry in science and research, a number of promising initiatives and programmes have been launched internationally. The KFPE was among the pioneers in this respect. Its 25-year record testifies to a great variety of activities: It has delivered guidelines for North-South research partnerships, issued discussion and information papers, organised workshops and conferences, contributed to the establishment and implementation of large-scale North-South research programmes, and provided expertise for national and international projects. International best-practice standards and codes of conduct have referenced the KFPE's guidelines for North-South research partnerships since they were first published some 20 years ago. The KFPE's track record thus suggests that the history of this commission may deliver interesting insights into the bigger picture of North-South research in Switzerland during this time.

Apart from a short historical review on the occasion of the KFPE's 10th anniversary, however, the history of the KFPE has not yet been recorded. The present historical study was carried out on a part-time basis between January and May 2020. Sources used include interviews with the past and current KFPE presidents and heads of secretariat, KFPE annual reports (1994–2019), and internal and public documents, correspondence, statements, and publications.

The report is organised into four chapters. After a brief introduction (Chapter One), the historical approach is

⁵ German: Kommission für Forschungspartnerschaften mit Entwicklungsländern; French: Commission pour le partenariat scientifique avec les pays en développement.

⁶ In the early days of the KFPE, the expression 'research partnerships with developing (and transition) countries' was used. Later, the terms 'transboundary research partnerships' or 'North-South research partnerships' were employed. For the sake of consistency, the latter will be used for most of this report unless the former term is needed to convey particular historical meaning.

⁷ This conclusion was endorsed most recently by the Independent Group of Scientists appointed by the Secretary-General of the United Nations in the Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development.

specified and a short history of the KFPE is presented in five phases (Chapter Two). The KFPE's specific achievements are discussed in Chapter Three. Chapter Four considers the performance and impact of the KFPE and describes several features particular to North–South research promotion in Switzerland.

During one of the interviews conducted for this study, a former president expressed his vision that one day in the future, 'North–South research' would no longer need a special category; there would just be 'research'. At this point, the KFPE would become obsolete. Unwittingly, he rephrased a vision that had been voiced in the early days of the commission. The present history, however, shows that the KFPE continues to fulfil an indispensable role in the promotion of North–South research in Switzerland and beyond.



2. History of the KFPE

The KFPE is a commission comprised of a dozen individual members and some forty associated member institutions. As a network of researchers and stakeholder groups, the KFPE operates across a wide range of fields of practice. Despite this diversity, the commission's mission, objectives, and overall institutional profile have not changed significantly over the years and it has shown exceptional resilience and permanence over the past quarter of a century. Its human resources and operational budget have remained modest, as it has relied on the voluntary work of its members and a single part-time position to head its secretariat.

The KFPE's history was shaped at the intersection of the science policy, development policy, and research communities. At this intersection, the commission has been dedicated to promoting North–South research, a particular type of research that is carried out on the sidelines of mainstream scientific research traditions and practices. The development and achievements of the KFPE, therefore, can be traced by studying its interaction with the science policy, development policy, and research contexts.

Organisations operating at the interface of the research and policy communities, such as the KFPE, can play a role in determining standards and quality criteria for science. This intersection is of interest to the interdisciplinary field of Science & Technology Studies (STS), which has developed tools and concepts to study such organisations. The STS perspective will be consulted to study the history of the KFPE because it helps to shape the complex environment of the KFPE, thus narrowing the scope of the historical study and offering an interpretive frame for considering the significance of the KFPE for North—South research in Switzerland.

The KFPE's history can be divided into five phases, which includes a preparatory phase leading up to the commission's establishment:

- Origins, 1989 to 1993
- Early years, 1994 to 1999
- Take-off: 2000 to 2008
- Policy intermezzo: 2009 to 2012
- Resumption: 2013 to 2019

2.1. Origins, 1989 to 1993

The Commission for Research Partnerships with Developing Countries (KFPE) was formally established on 3 March 1994 by the Council of the Conference of the Swiss Academies (CASS)⁸, at the request of the Swiss Academy of Sciences (SCNAT)⁹. Three CASS academies agreed to each commit CHF 110,000 per year for a three-year pilot project (1994–1997). The KFPE was to be composed of committee members and a broader community of associated organisations. Committee members were to represent prominent national and international figures and reflect the Swiss landscape of institutions involved in research partnerships with developing countries. Science agencies, public administration, and other institutions were invited to participate as associated institutions.

Prof. Thierry A. Freyvogel was elected as the commission's first president and Dr. Daniel Maselli was appointed head of secretariat, a part-time position (50%), assisted in accounting matters by the bookkeeper of the SCNAT, Sylvia Furrer. At the time of the KFPE's constitutive meeting and first plenary session in mid-November 1994, the commission consisted of nine members from Swiss higher education institutions; two members each from foreign economic policy, NGOs, and politics; and four ex-officio members from the CASS.

⁸ The Council of the Conference of the Swiss Academies (CASS) was renamed Swiss Academies of Arts and Sciences (a+) after its restructuring in 2006.

⁹ At the time the SCNAT was called the Swiss Academy of Sciences (SAS). For the sake of simplicity, the current abbreviation of the Swiss Academy of Sciences, SCNAT, will be used throughout the text. The English abbreviation of the SCNAT changed only once (from SAS to SCNAT in 2004); in German and French it was changed in both 1988 and 2004 Schweizerische Naturforschende Gesellschaft (SNG)/Schweizerische Akademie der Naturwissenschaften (SANW)/Akademie der Naturwissenschaften Schweiz (SCNAT) and Société Helvetique des scineces naturelles (SHSN)/Académie suisse des sciences naturelles (SCNAT).

The KFPE immediately developed operational and action plans, based on specifications that had been formulated in the Strategy for the Promotion of Research in Developing Countries the previous year, 1993. Within just two years, the KFPE coordinated its first large international conference on research partnerships with developing countries on attracting 400 participants from 66 countries. Its organizing committee was composed of representatives from development policy, science policy, and research communities. High-profile speakers participated in the event, including a federal councillor and directors of the Swiss Agency for Development and Cooperation (SDC), the Swiss Academy of Sciences (SCNAT), and the Swiss National Science Foundation (SNSF).

How was this new commission able to mobilise a wide range of participants and prominent leadership within such a short time span? The following section will show that considerable preparatory work had been carried out to pave the way for the KFPE. To understand this work it is necessary to first briefly describe the state of Swiss research cooperation with developing countries in the years leading up to the KFPE's establishment.

The idea of a 'Commission for Research Partnership' was proposed in the Swiss Strategy for the Promotion of Research in Developing Countries in 1993. This strategy was jointly published by the SDC¹² at the Federal Department of Foreign Affairs (FDFA) and by the SCNAT (on behalf of the CASS). It had been formulated by the working group for the Promotion of Research in Developing Countries (PRDC) which had been set up by the SDC and the SCNAT (acting on behalf of the CASS) in the autumn of 1990 (SDC and SAS, 1993). The idea to establish a working group had been put forward at a symposium at the annual meeting of the SAS on Third World and Natural Sciences on 13 October 1989 in Fribourg.

The national strategy, the working group, and the national meeting were important milestones leading up to the formation of the KFPE. However, they still leave open the question of the driving agents and forces that led to the commission's foundation: Why was the SCNAT concerned with the topic of 'Third World and Natural Science' in 1989? Why was a joint working group established after this event? And why did this working group consider it necessary to formulate a national strategy to promote

research in developing countries? These questions will be considered in the following paragraphs.

Research cooperation with developing countries

In the early 1990s, little was known about Swiss research cooperation with developing countries. Later studies showed that Switzerland maintained scientific contacts with developing countries but that there was a need to coordinate these activities and orient them more strongly to serve the objectives of capacity building and research partnership. The SDC funded most of these research projects as well as several long-term research programmes. ¹³ Another funding source was the Federal Commission for Scholarships for Foreign Students (FCS), ¹⁴ which had been established in 1987 to promote international exchange and research cooperation and allocated around fifty scholarships each year to students from developing countries (SDC and SAS, 1993).

For many years Switzerland had also been supporting the Expanded Program of Technical Assistance of the United Nations, sending Swiss engineers to work in countries in Asia and Latin America. And in Switzerland itself, several research and education centres ran projects that focused on developing countries, such as the Swiss Tropical Institute (STI) at the University of Basel, the Institute of Geography at the University of Bern, the Graduate Institute of International Studies (IUHEI) and the Graduate Institute of Development Studies (IUED) in Geneva, and postgraduate courses of the Swiss Federal Institutes of Technology in Lausanne and Zurich (SDC and SAS, 1993).

However, unlike other European countries such as France or the UK, Switzerland had no postcolonial network of research institutes across the world. Only two research centres were supported in developing countries, both of which were located on the African continent and associated with the STI at the University of Basel; the Centre Su-

To International Conference on Scientific Research Partnership for Sustainable Development – North-South and South-South Dimensions, 5–7 March 1996.

¹¹ Members of the organizing committee represented the IUED, the SDC, the Swiss Priority Programme Environment (SPPE), and the SCNAT.

¹² At the time the SDC was called the Directorate of Development Cooperation and Humanitarian Aid (DCA)

¹³ Examples are the Soil Conservation Programme in Ethiopia (1981–1998, CHF 16 million) and the Laikipia Research Programme in Kenya (1984–2008, CHF 8 million) (Kiteme & Wiesmann, 2008), both carried out at the Institute of Geography of the University of Bern (GIUB).

¹⁴ The Federal Commission for Scholarships for Foreign Students (FCS; Eidgenössische Stipendienkommission für ausländische Studierende, ESKAS) is based on the Federal Law on Stipends for Foreign Students and Artists in Switzerland (Bundesgesetz über Stipendien an ausländische Studierende und Kunstschaffende in der Schweiz vom 19. Juni 1987). 'The FCS is comprised of 16 members representing the interests of Swiss higher education institutions, the Swiss Conference of Rectors of Higher Education Institutions, and students. The FCS is administratively part of the Federal Department of Economic Affairs, Education and Research (EAER). The FCS Secretariat is managed by the State Secretariat for Education, Research and Innovation (SERI).' https://www.sbfi.admin.ch/sbfi/en/home/education/scholarships-and-grants/commission-fcs.html

isse de Recherches Scientifiques (CSRS) in Côte d'Ivoire (established in 1951) and the Ifakara Centre Suisse in Tanzania (founded in 1957).15 The SCNAT entertained close historical ties to the CSRS; both the CSRS commission and CSRS foundation had originally been placed under its jurisdiction. Many individuals involved in the establishment and later development of the KFPE were at some point affiliated with these two research institutions in the global South¹⁶ and gained experiences in North-South research. Several of them also at some stage occupied key positions at the SCNAT and entertained close ties to the main university centres involved in North-South research in Switzerland.17 The SCNAT also participated in international organisations, such as the TWAS (Academy of Sciences for the Advancement of Science in Developing Countries)18, the Committee on Science and Technology in Developing Countries (COSTED), and UNESCO, and donated various funds for travel stipends or educational purposes (Haselbach et al., 1990).

At the end of the 1980s, international development aid was on the brink of a new era. The development policies of Northern countries had left developing countries with unpayable debts, which had risen more than tenfold between 1970 and 1990. With the end of the cold war, foreign policy in general and the relationship of industrialised with developing countries needed to be reconsidered. Against this background, the SCNAT dedicated its annual conference of 1989 to the topic (The Third World and the Natural Sciences) and invited the director of the SDC, ambassador F.R. Staehelin, to make the opening statement.

The Conference on the Third World and the Natural Sciences

'It is high time to confront the role of the third world in the field of "knowledge".

F.R. Staehelin, Director of the SDC, 1989

The symposium on the Third World and the Natural Sciences in Fribourg was the first of its kind in Switzerland. The event brought together representatives from the SCNAT, the SDC, and the Swiss research community to discuss ways of joining forces to strengthen and improve research collaboration with developing countries. Rather than transferring science – that is, viewing technology as aid given by the North to developing and transition countries in the South – research cooperation was to emphasise capacity and institution building and consider local needs and conditions to strengthen scientific independence.

Conference contributions reflected the broader international development policy changes that were taking place at the time. The category of the 'third world' was debated and partnership models for research and development aid to developing countries were discussed. 19 Concluding presentations at the symposium called for change: for the Swiss higher education and research institutions and their research communities to assume responsibility and engage global developments topics; for the academies and the SNSF to increase their commitment to providing structures and funds to expand financial support for cooperative projects; and for the SCNAT and the CASS to establish a working group to address these concerns and assess possibilities for cooperation and coordination (Haselbach et al., 1990).

Following the event, the newly elected president of the SCNAT, Prof. Paul Walter, instructed Prof. Thierry Freyvogel²⁰ to present proposals to its executive committee. Within a year, the SDC and the SCNAT established a working group of some 30 members, under the auspices of the CASS, and tasked it to develop guidelines for sustainable promotion of scientific research and academic teaching in developing countries (Freyvogel & Hurni, 2004:5).

The Centre Suisse de Recherches Scientifiques (CSRS) in Côte d'Ivoire was created in 1951 as a foundation administered by an SAS commission. The sentence will begin with 'A local commission' for the CSRS was created for the Swiss Tropical Institute Field Laboratory in Abidjan (Meier, 2012: 90). The origins and history of the CSRS are described in Aeschlimann et al. (2001), Tanner et al. (1994), and Meier (2012).

¹⁶ In this study, 'global North' refers broadly to higher-income countries with a relatively developed higher education sector and that have greater levels of global political and economic influence. 'Global South' refers to lower and middle-income countries – listed as such by the OECD Development Assistance Committee (DAC) – that tend to hold less power and have less developed research systems. We recognise that these are contested terms that mask inequalities within regions and countries across both groups (LIKPL and KEPE 2018)

¹⁷ It is worth detailing some of these affiliations: Bruno Messerli was vice-president of the SAS and one of the founders of the CDE at the University of Bern; André Aeschlimann was director of the CSRS (1958–1962), president of the SCNAT (1983–1988) and later president of the National Research Council of the SNSF (1988–1996); Thierry Freyvogel was involved in the establishment of the Field Laboratory in Ifakara from 1955–1958, was vice-president of the SCNAT, and director of the STI (1972–1987); Anne-Christine Clottu Vogel was collaborator and secretary general of the SAS, and later became president of the foundation council of the IUFD.

¹⁸ The TWAS was founded as the Third World Academy of Sciences in 1985. Its name was changed to the Academy of Sciences for the Developing World in 2004, and again in 2010 to The World Academy of Sciences for the Advancement of Science in Developing Countries.

⁹ Haselbach, E., Lampel, G., Meyer, D. and P. Sprumont (eds.). 1990. Dritte Welt und Naturwissenschaften. Vol. 3. Herausgegeben von der Schweizerischen Naturforschenden Gesellschaft.

²⁰ Prof. Freyvogel was former director of the Swiss Tropical Institute and Prof. Walter was director of the Biochemical Institute at the University of Basel.

The Working Group for the Promotion of Research in Developing Countries (PRDC)

In late 1990, the SDC and the SCNAT convened the Working Group for PRDC, on behalf of the CASS (SDC and SAS, 1993). The secretariat of the PRDC was run by the SCNAT. Three years later, in July 1993, the PRDC published the Swiss Strategy for the Promotion of Research in Developing Countries, which proposed to establish a permanent commission for research partnership with developing countries. With the foundation of the KFPE, the working group was discontinued. In many ways, therefore, the PRDC may be regarded as the commission's forerunner.

The establishment of a permanent commission was not the only recommendation of the Strategy; it also proposed to launch a 'Special Programme' to promote research partnerships with developing countries. Furthermore, the Strategy and the establishment of the KFPE were not the only achievements of the PRDC during its short period of activity between 1990 and 1993. The working group also commissioned two reports that delivered important information on the status of Swiss research cooperation with developing countries; these served as necessary foundations for subsequent decision-making in development and science policy agencies.

Shortly after its foundation, the PRDC commissioned a project to assemble a directory of Swiss scientists and institutions involved in research with or for developing countries. A preliminary survey of institutions, research projects, and researchers engaged in scientific cooperation with developing countries was carried out, coordinated, and published by the Institute of Development Studies (IUED) at the University of Geneva in August 1992. ²¹ That same summer, the PRDC approached the Swiss Science Council (SSC) to ask them to undertake a study to assess the Swiss situation with regard to international developments and consider how these results should impact the allocation of North–South research funds and research capacity in Switzerland. The final report on this study was published in 1994. ²²

The PRDC was also involved in the process leading up to the first large national research programme with developing countries, 'Module 7' of the Swiss Priority Programme Environment (SPPE). Several of the features of this research programme were continued in subsequent large national research programmes, such as its special emphasis on environmental problems and its joint funding by the SDC and the SNSF. Furthermore, during its first years, the KFPE would closely collaborate with this research programme. For these reasons, SPPE Module 7 will be briefly described below.

Module 7 of the Swiss Priority Programme Environment (SPPE Module 7)

Module 7 of the SPPE was dedicated to 'Development and Environment' and its aim was to promote capacity building and contribute to the solution of environmental problems by establishing research partnerships between the global North and South (Maselli, 2001:209). The Swiss Priority Programmes (SPP) were introduced as a new research funding tool in 1991. At the time, the Swiss research funding policy was to distribute funds by scientific discipline rather than by topic. The new SPPs, in contrast, were decided on in a top-down process starting with approval by the Swiss Parliament, after which the programme would be administered by the SNSF.

The first six SPPs were approved by Parliament in 1991 but funding cuts were imposed due to federal savings that put Module 7 of the SPPE on hold. This impasse was overcome at the end of 1992 and a call for Module 7 projects was issued in a fast-tracked process²³ despite the federal financial constraints. The SDC and the SNSF came to an agreement whereby the SDC would finance the research expenses and development-related components of the South and the SNSF would cover the expenses of the Swiss researchers. Between its kick-off in 1992 and its termination in 1999, SPPE Module 7 received CHF 15.2 million under this joint funding arrangement.

The decision to finance a module to support research with developing countries was influenced by the highest level of Swiss government and may have at least partly been connected to the United Nations Conference on Environment and Development (also known as the Earth Summit) in Rio de Janeiro in June 1992. Witzerland was among the 172 nations who committed to the 27 principles of the Agenda 21 Programme of Action for Sustainable Development at this conference. Here, for the first time, research

²¹ Corminboeuf, Christian, and Université De Genève. Institut Universitaire D'études Du Développement. Who Does What in Switzerland: Scientific Cooperation with Developing Countries: A Preliminary Survey of Institutions, Research Projects, Researchers. Genève: Institut Universitaire D'Etudes Du Développement, 1992.

²² Graf, Christoph und Zinkl, Wolf D. 1994. Die F\u00f6rderung Entwicklungsl\u00e4n-der-relevanter Forschung und Entwicklung in der Schweiz. Impulse f\u00fcr eine Neuorientierung. Forschungspolitische Fr\u00fcherkennung FER Nr. 145/1994. Schweizerischer Wissenschaftsrat, Bern.

²³ The call for Module 7 projects was published at the end of February 1993 and draft projects had to be submitted by end of April 1993.

²⁴ Swiss Federal Councillor Flavio Cotti led the Swiss delegation and subsequently advocated the establishment of the SPPE Module 7. The delegation also included Bruno Messerli, at the time also a member of the PPDC

partnerships with developing countries were named as a requirement to improve scientific capacity in the South, to address global problems, and to promote sustainable development. The Swiss Strategy for the Promotion of Research in Developing Countries, too, referred to the 1992 Rio Earth Summit in its rationale for building new research partnerships with developing countries.

The Swiss Strategy for the Promotion of Research in Developing Countries

Against the background of the launch of the first major North-South research funding programme in Switzerland, the PRDC submitted the Swiss Strategy for the Promotion of Research in Developing Countries to its two commissioning agencies, the CASS and the SDC, in June 1993. The Strategy spelled out in detail the need for action to improve research cooperation with developing countries and proposed measures to address the situation (SDC and SAS, 1993). These measures included creating a permanent advisory commission, providing incentives for development-related research in Switzer-land and in developing countries, establishing a Swiss information centre, and offering training to scientists from developing countries. However, the strategy's most significant proposal was to launch a 'Special Programme' to provide the framework for instituting a new type of research partnership.

Most of the measures proposed in the Strategy were to be further pursued by an independent advisory commission that could be tasked with 'the assessment of current projects or the sensitisation of the Swiss scientific community to scientific research needs of developing countries, the supervision of the proposed "Central Bureau of Information", or further preliminary work on the "Special Programme"' (SDC and SAS: 1993: 13). The CASS would mandate and supervise the proposed 'Commission for Research Partnership' and determine its membership, tasks, and extent of authority at a later stage. The new commission was expected to focus its attention on two issues: supervising a Central Bureau of Information and the Special Programme (SDC and SAS, 1993).

The proposed instrument of a Special Programme warrants more detailed description because this idea has reappeared in different forms in the history of North–South research in Switzerland. The original idea was to design a programme that would attain the common goals of the Swiss authorities concerned with research or with development policies, respectively. Swiss federal research policy was seen to be 'predominantly concerned with maintaining and increasing the international competitiveness of Swiss science and scientific research' and interests (SAS and SDC, 1993: 15). In contrast, Swiss federal de-

velopment policy was generally considered to focus on the concerns and efforts of developing countries. The promotion of research partnerships with developing countries, however, was of interest to both science policy and development policy and therefore required a special programme. Accordingly, it would need to combine political measures related to both development and research and be funded by a diversity of sources at about CHF 20 million annually (SDC and SAS, 1993).

The Special Programme was proposed in general terms and its affiliation and organisational structure had yet to be determined. It was intended to be based on the principle of research partnership and to promote sustained, interdisciplinary, and regionally wide-ranging partnerships. There appear to have been some early intentions of implementing the Special Programme provisionally within the framework of SPPE Module 7. However, by the time the Strategy was republished three years later in 1996, it was clear that the Special Programme 'was unlikely' to receive federal funding (SDC and SAS, 1996: 2).

To this day, the PRDC's Strategy for the Promotion of Research in Developing Countries remains the only national strategic document to have been jointly developed by agencies that implement scientific and development policy and for this reason it may be considered a unique historic achievement in its own right. The establishment of the KFPE was the Strategy's longest-lasting achievement, while other steps and measures, such as launching a 'Special Programme', had to be shelved for the time being (SDC and SAS, 1993). The Strategy offers a glimpse into the issues being pursued within in the wider context of the research and policy communities before the establishment of the KFPE.

The development and science policy contexts

While the PRDC was busy carrying out its work in the early 1990s, Switzerland was in the midst of reshaping its development policies and activities. In 1991, Switzerland launched a debt relief programme which allocated a parliamentary credit of CHF 500 million by the Swiss government to mark the country's 700-year anniversary.²⁵ In the same year, a postulate requested that the Swiss Federal Council undertake a cross-departmental discussion and analysis with the aim of developing guidelines and a coherent development policy to reshape Switzerland's relationship with developing countries. This eventually led to the publication by the Federal Council, in 1994,

²⁵ The Debt Relief Programme was jointly run by the State Secretariat for Economic Affairs (SECO), the SDC, and a coalition of development organisations

of the North-South Guidelines, which spelled out policy principles that acknowledged the complexity and increased mutual dependence of industrialised and developing countries. Two popular votes affected Swiss foreign policy during these years: the decision to join the Bretton Woods Institutions and the decision not to join the European Economic Area.

The North-South Guidelines reveal the extent to which Switzerland's new development policy was influenced by the general transformation in international development discourse which started taking shape at the 1992 Rio Earth Summit and its Agenda 21 Programme of Action for Sustainable Development. This discourse emphasised that North—South research partnerships were essential for sustainable development, and that developing such partnerships required new forms of research cooperation and funding mechanisms.

Meanwhile, the Swiss research policy community was busy with its own challenges and institutional transformations. With the passing of the first Research Act of 1983, the research budget was regularly submitted to Parliament by way of dispatches. The implications of this Act on the institutional environment and the research community were still playing out in the early 1990s. The Swiss rejection of membership of the European Economic Area in December 1992 coincided with an important time in European science policy. In the same year, the Maastricht Treaty empowered the European Commission (EC) to undertake initiatives to ensure coordination between member states. As a result, the status of the EC's research framework programmes (FP) were elevated, their research budget increased, and their focus on industry and technology development expanded. They became the main instrument of a common European science policy. Securing Swiss participation in these FPs became the principal priority of Swiss international science policy in the ensuing years (Hofmänner, 2018).

Against these developments, international scientific cooperation was considered of increasing importance to Swiss science policy and was emphasised in the Federal Dispatch on the Promotion of Scientific Research during 1992–1995. However, 'international cooperation' in actual fact signified research collaboration with Europe, which included Swiss cooperation in international projects. To Switzerland dispatched its first scientific council-

lor to Brussels in 1990, formally started participating in the FPs of the European Union (EU) in 1992, and opened an information and liaison office for European policies and programmes in research, innovation, and education (SwissCore) in Brussels in 1995. Formally, federal responsibility for international science policy at the beginning of the 1990s rested with the Federal Office for Education and Science, which had been established in 1979. The responsibility for the EU FPs was vested with the Group for Science and Research²⁸ which had been established at the Federal Department of Home Affairs in 1990.

Legally, the Federal Council was authorised to pursue international science policies with Europe after the framework agreement between Switzerland and the EC was approved by the Swiss Parliament in 1987. It is worth noting that Swiss science policies in the field of development cooperation had already been formalised much earlier, in the 1976 Federal Law on International Development Cooperation and Humanitarian Aid.

To summarise, the KFPE was established at a time of great transformation in Swiss science and development policy. The SPPs had been launched as a new type of Swiss research promotion amidst what was perceived as an increasingly competitive European science policy. The Swiss Parliament had agreed to invest in scientific research partnerships with developing countries - a remarkable decision given the constraints of the federal budget at the time. To build these partnerships, the SDC and the SNSF partnered financially for the first time. A new national strategy was formulated to promote research partnerships with developing countries and proposed a 'Special Programme' for this purpose. The PRDC had assembled a group of committed individuals from across the science policy, development policy, and research communities dedicated to promoting research partnerships. All of these developments offered promising prospects for the KFPE to begin work.

²⁶ Over the years, the scope and titles of the Federal Dispatches on the Promotion of Research have changed. Since 2008, the research budget has formed part of the Federal Dispatch on the Promotion of Education, Research and Innovation (ERI) (ERI Dispatch).

²⁷ Examples for these international cooperation projects are the European Organisation for Nuclear Research (CERN), the European Southern Observatory (ESO), and the European Space Agency (ESA).

2.2. Early years, 1994 to 1999

'Away from entrenched tracks! Something light, flexible, and new is needed.'

(Graf & Zinkl 1994: 79)

After its establishment in 1994, the KFPE developed a work programme that followed closely the stipulations of the 1993 Swiss Strategy for the Promotion of Research in Developing Countries. Nine ambitious lines of action were identified, which included drawing lessons from SPPE Module 7 and pursuing further possibilities to promote the proposed Special Programme. Other lines of action were to develop an instrument for evaluating project research partnerships, to optimise regulations of development cooperation institutions, and to develop communication instruments to disseminate information. Three tasks in particular occupied the KFPE's agenda during these first years: organizing the International Conference on Scientific Research Partnership for Sustainable Development, writing the first Guidelines for Research in Partnership with Developing Countries, and promoting the Special Programme.

The KFPE's initial pilot phase from 1994 to 1997 was extended to a second pilot phase from 1997 to 1999. The first head of the KFPE secretariat, Dr. Daniel Maselli, left in 1997 to head the SDC's Research Desk. He was succeeded by Dr. Jon-Andri Lys, who was to remain at the helm of the secretariat until 2020. By the end of the second phase, the commission had been granted the status of a regular commission of the CASS with formal statutes.

International Conference on Scientific Research Partnership for Sustainable Development – North-South and South-South Dimensions

Soon after its establishment, the KFPE started preparing an international conference on Scientific Research Partnership for Sustainable Development – North-South and South-South Dimensions to take place in Bern on three days in March 1996.²⁹ The principal aim of the conference was to call the attention of the scientific community and of decision-makers to the value of research for development and to the importance of partnership in research with and among countries in the South. The conference convened researchers from institutions in the North and

The conference was to become a landmark event. It attracted international participants and for the first time, brought together the Swiss science policy, development policy, and research communities around the question of North-South research partnerships. It was supported by a broad coalition of public representatives and funding partners, which gave it political weight and scientific importance. Speakers included a federal councillor, directors of the SDC, the State Secretary of Education and Research, and representatives from the SNSF (SPPE). Financial support for the conference was provided by the SDC, the SPPE, and the SCNAT, with grants for Southern participants from the Federal Office of Environment, Forests and Landscape; the SNSF; the STI Basel; the Swiss Federal Institute of Technology; CIBA-Geigy Foundation for Cooperation with Developing Countries; Intercoopération; and the University of Zurich. The organizing committee included representatives from the Swiss Academy of Sciences, the SDC, the SPPE, and the IUED of the University of Geneva. Assembling such a broad range of interest groups to consider practical problems within only a short period of time attests to a logistic and organisational masterpiece that put to test the role of the new KFPE.

Key problems of the new concept of North–South research partnerships were debated at the conference, with an emphasis on exploring both Northern and Southern perspectives and new agendas. Issues covered included practical research methodology, administration and communication, institutions and infrastructure, peer review criteria, legal and financial issues, and research and development policy. Overall, the discussions emphasised the material and policy conditions required for North–South research partnerships and stressed the need for best-practice guidelines. One of the key outcomes of the conference was the first public reference, at highest science policy level of the Swiss State Secretary, to the need for a Swiss Priority Programme dedicated entirely to North–South research partnerships.

Recommendations put forward at the 1996 Conference largely endorsed those proposed in the Swiss Strategy for the Promotion of Research Developing Countries in 1993. However, with regard to the specific challenges in North–South research partnerships in Switzerland today,

South to share their research partnership experiences, in order to jointly define new ways to design research collaboration and institutional partnerships that would enhance research capacity and institution building. Lastly, the conference provided the opportunity for the international scientific community to scrutinise the new Swiss development policy as formulated in the North-South Guidelines of the Federal Council in 1994 (Maselli and Sottas, 1996: 14).

²⁹ The original proposal for the conference was put forward by the Institute for Development Studies at the University of Geneva (Freyvogel, 1996:15).

it is useful to recall some of the suggestions made over 20 years ago:

- to revise Swiss policy in light of international cooperation, particularly with developing countries;
- to accept long-term commitments in Northern countries and to avoid a 'stop-and-go' policy;
- to seriously consider adding a partnership element to the existing criteria for academic value of projects submitted to the SNSF;
- to support the basic sciences and fundamental research alongside goal-oriented and applied research;
- to 'establish a Code of Conduct for research partnership' (Maselli et al., 1996: 23-26).

The last recommendation reflected repeated calls from the research community for guidelines for North—South research partnerships. Taking up these calls, the KFPE initiated a participatory project after the conference to develop such guidelines.

Guidelines for Research Partnership with Developing Countries

The SNSF and the SDC agreed to fund the Guidelines Project and a working group was convened to oversee the drafting process. The KFPE took on the task of coordinating this participatory process, which included several rounds of internal, national, and international reviews and took two years. Guidelines for Research in Partnership with Developing Countries, 11 Principles was published by the KFPE in 1998.

The guidelines acknowledged that 'research partnerships made heavy and unusual demands on the partners' and aimed to offer practical measures for meeting these demands (KFPE, 1998). They specified the overall aims of research partnerships, and put forward suggestions to implement and questions to evaluate them. Eleven principles were formulated to integrate both developmental relevance and scientific merit into the project appraisal process. However, the guidelines did not lay down specific criteria for donor institutions to follow in project evaluation programmes. All principles followed the tenet of increasing research capacity in developing countries to achieve genuine partnership. Of particular note is the emphasis of the guidelines on the role of North–South research partnerships and capacity building in the South

in relation to global sustainable development³⁰ – only a few years after the 1992 Rio Earth Summit, and two years before the United Nations Millennium Goals for Sustainable Development (MDGs) were launched in 2000. Nonetheless, the guidelines were primarily addressed to the (Swiss) research community in the hope that they would also be useful to partners in the South who were planning projects (KFPE 1998). This would present one of the motives for reviewing the guidelines a decade later.

From the outset, the guidelines were a great success. The text was published in five languages (French, German, English, Spanish, Portuguese) and distributed widely, presented at a media conference, reported on in newspapers in Switzerland and abroad, and broadcast over radio stations. A year after their publication, they were presented at the World Conference on Science in Budapest, organised by the International Council for Science (ICSU) and UNESCO in 1999. By the turn of the century, the guidelines had already become the hallmark of the KFPE, both at home and abroad.

At the turn of the new millennium

Over these first years, the KFPE participated in many joint activities and committees with Module 7 of the SPPE. It built a network of associated institutions, gathered and disseminated information, published articles, and held meetings with representatives of national and international agencies and organisations, such as the SNSF, the Swiss Science Council (SSC), the Group for Science and Research (GWF), Swiss parliamentarians, the ICSU, and UNESCO. It also received invitations by international agencies and organisations to participate in workshops and conferences.

Overall, the KFPE could look back on five successful years: the CASS had granted the commission permanent status, and several successful events and projects had been carried out which had made their mark nationally and internationally. The KFPE and its forerunner, the PRDC, had contributed to changing the course and capacity for research partnerships with developing countries in Switzerland during the 1990s. The KFPE was even mentioned in the Federal Dispatch on Education, Research and Technology for the years 2000–2003 – alas, for the first and last time.

³⁰ The Forum for Climate and Global Change of the SAS (ProClim) issued a publication on Research on Sustainability and Global Change – Visions in Science Policy by Swiss Researchers in June 1997. In this document, Swiss researchers put forward their ideas and suggestions for possible action, thereby detailing their approach to research on sustainability and global change in a way which will enable them to both assume their social responsibilities and contribute to sustainable development.

Despite this success, it became clear at the end of this phase that the KFPE's efforts to implement the key proposal of the Swiss Strategy for the Promotion of Research in Developing Countries to establish a 'Special Programme' had not borne fruit and would have to be shelved. With the SPPE Module 7 nearing its end, the question of how to continue the experiences and partnerships were a matter of concern to the KFPE. The SNSF and the SDC launched a smaller new joint programme (CHF 1 million each) and the SDC introduced two new funding programmes to support young researchers: Echanges Universitaires and Jeunes Chercheurs.

In 1999, an opportunity arose when a new research funding mechanism was introduced in Switzerland: the National Centres of Competence in Research (NCCR). A group of members and associated members of the KFPE collaborated with the secretariat to draft and submit a joint pre-proposal under this new funding scheme entitled NCCR North-South: Research Partnerships for Mitigating Syndromes of Global Change.³¹ The proposed

programme aimed at bringing together researchers from the natural sciences, social sciences, and humanities to jointly address questions on key topics in a number of global regions, with a majority of researchers and partner institutions in the global South. It envisaged the KFPE taking on coordination and communication tasks within the programme.

The NCCR North-South pre-proposal did not make the shortlist. Nevertheless, the participating institutions decided to submit a full proposal in March 2000, speculating on the outstanding international scientific reviews the pre-proposal had received. Their bold venture was rewarded and the NCCR North-South was approved by the Swiss Parliament a year later. Thus, the KFPE played an important intermediary role in securing a follow-up funding scheme to build on the North-South research experiences and partnerships that had been promoted in Switzerland in the 1990s.

³¹ The 'Syndrome Approach' for global change research was introduced by the German Advisory Council on Global Change (WGBU) in its report on World in Transition: The Research Challenge published in 1996 (WGBU, 1996). In the NCCR North-South, this concept was extended towards syndrome mitigation, i.e. solution-oriented research.



2.3. Take off, 2000 to 2008

At the turn of the millennium, the KFPE had established a national and international reputation. Its guidelines were being consulted by researchers, by funding agencies, and by agents in science policy and development policy settings. The KFPE had assumed a coordinating role to bring together stakeholders in Switzerland, as a network of participants but also as potential collaborators.

At the beginning of this phase, the KFPE developed a new strategic framework with three fields of activity: 1) network and institution building (national and international); 2) communication and information; and 3) conceptual and strategic development. Core funds for the KFPE still came from the four academies with various additional project mandates by the SNSF and the SDC. During this entire phase, the CASS underwent institutional reforms that reorganised its associations, commissions, and panels. Its name was changed to Swiss Academies of Arts and Sciences (a+) in 2006. This process affected the future institutional association and funding sources of the KFPE. By the end of this phase, the KFPE was repositioned as a working group of SCNAT and formed part of its Platform Science and Policy. Four presidents guided the KFPE operations through this phase: Hans Hurni (1999-2001), Anne Clottu Vogel (2002-2004), and Bruno Stöckli and Marcel Tanner (2005–2012).32 To cope with the increasing workload, employment at the secretariat was expanded to 80%. The KFPE developed and revised communication strategies, carried out a media seminar on research partnerships with developing countries in 2004, and started issuing a newsletter in 2007.

The KFPE was instrumental in bridging the transition phase between the first two large North–South research programmes in Switzerland, the SPPE Module 7 (1992–1999) and the NCCR North-South (2001–2013). As mentioned above, the commission was involved in preparing, coordinating, and submitting the proposals for an NCCR on North–South issues at the turn of the century. In parallel, it assumed a coordinating and facilitating role for the research and policy communities to learn lessons from the experiences of the first programme and to implement the lessons learned in the new programme. In 2000, the KFPE facilitated an international workshop in Bern on Enhancing Research Capacity in Developing and Transition Countries: Experiences and Tools for Promoting Research

on Sustainable Development, and a year later published the conference proceedings.³³

In brief, the KFPE was involved in coordinating the application process for submitting a full proposal by several members and affiliated institutions under the call for National Centres of Competence. The second large Swiss research partnership programme with developing countries, the NCCR North-South, was approved by Parliament in June 2001 and remained at the centre of the KFPE's attention in subsequent years. Subsequently, the commission initiated two multi-year projects on the impact and selection criteria for North-South research projects, organised a large number of conferences and workshops, and was involved in the programme's evaluation. Given the great impact of the NCCR North-South during the first decade of the new millennium, and the close alignment of the KFPE's activities with this programme during this phase, the NCCR North-South is briefly introduced below.

The NCCR North-South

The NCCR North-South was a 12-year research programme funded jointly by the SNSF, the SDC, and the participating institutions from 2001 to 2013, as one of 14 National Centres of Competence in Research approved by both chambers of Parliament in December 2000 and June 2001. The project employed new integrative and transdisciplinary research approaches to jointly produce knowledge for sustainable development in developing and transition countries in Africa, Asia, and South America. Through these approaches, the NCCR North-South over the years assembled a network of partners in more than 40 countries including around 350 researchers at PhD and postdoc levels, and about 500 Master's students. Research partnerships funded by the NCCR North-South were conducted between institutions in Switzerland and partner institutions in the South, and were supported by eight regional coordination offices.34

Many activities of the KFPE between 2000 and 2009 were related to the NCCR North-South. The Programme scheme opened up new opportunities and provided new incentives for North-South research partnerships. This was made possible by a joint funding agreement between the SDC and the SNSF, by which the SDC agreed to pay for the Southern expenses while the SNSF took over the Swiss expenses, with additional money provided by third parties and the University of Bern. By offering funding op-

³² Prof. Hans Hurni, Centre for Development and Environment CDE, University of Bern; Anne Clottu Vogel, Swiss Academy of Sciences, Bern; Dr. Bruno Stöckli, Alliance Sud; and Prof. Marcel Tanner, Director of the Swiss Tropical Institute (STI).

B33 Both the conference and the book publication were jointly sponsored by the SDC and the SNSF. KFPE. 2001. Enhancing Research Capacity in Developing and Transition Countries. Bern; Geographica Bernensia.

³⁴ http://www.nccr-north-south.unibe.ch/

tions for both Northern and Southern partners, the NCCR North-South improved the conditions for implementing several principles of research partnership from the 1998 KFPE Guidelines.

Another defining feature of this NCCR was its implementation of transdisciplinary research procedures. One of the key obstacles to transdisciplinary research is the time required to jointly develop proposals and define common goals and procedures. To prepare for the NCCR North-South's activities, the Swiss Association for Research Partnership Institutions was convened in early 2001. The Association launched a preparatory project, the NCCR North-South Syndrome Pre-Synthesis Project (SPSP), even before the NCCR had been approved by Swiss Parliament. The NCCR North-South proposal envisioned what it called 'joint areas of case studies' in the global South and the SPSP project carried out a transdisciplinary process to jointly set the agenda for these projects and to develop a sound conceptual and methodological framework with Southern partners (Hurni et al, 2004). Nine international workshops were carried out by the SPSP between April and August 2001. This joint preliminary process added new questions and issues to the research agenda and assisted the NCCR North-South in meeting the challenges related to setting up and maintaining equitable research partnerships over the next decade. The overall project was co-financed by the SNSF and the SDC (Hurni et al, 2004).

At the national level, the NCCR North-South also consolidated collaboration between institutions such as the Swiss Tropical Institute (STI) in Basel, the Institute for Development Studies (IUED) at the University of Geneva, the Swiss Federal Institute of Technology in Zurich (ETHZ), the Swiss Federal Institute of Technology in Lausanne (EPFL), the Universities of Bern and Zurich, and the Swiss Peace Foundation (swisspeace).

During the transition phase between the two large North—South research programmes, the KFPE organised an international conference on Enhancing Research Capacity in Developing and Transition Countries in Bern in September 2000. The aim of the conference was to take stock of the experiences gained in the SPPE Module 7 on Development and Environment and to draw lessons for the future.

Project Impact and Selection Criteria

Following the conference, the KFPE launched two projects to address questions relating to the impact of and selection criteria for North–South research projects, which had been raised repeatedly at the event. The first project was concerned with Improving Impacts of Research Part-

nerships.35 Impact assessments of North-South research at the time were typically limited to scientific criteria such as peer-reviewed articles, ratings in citation indexes, or economic outcomes. Little was known about the impact of North-South research partnerships and ways of evaluating them. This knowledge, however, was considered essential for donors, programme coordinators, and stakeholders (Maselli et al., 2004:14). The impact project aimed to improve the efficiency, effectiveness, and focus of North-South research partnership schemes. It was jointly launched by the KFPE and the Global Development Network GDN, and received funding from the SDC through the GDN. The KFPE convened an international Impact Assessment Working Group that consisted of several government agencies dedicated to international development cooperation.³⁶ Eight case studies were carried out and discussed at the GDN annual workshops between 2001 and 2004 in Rio de Janeiro (2001), Cairo (2003), and New Delhi (2004).

The second project, (Choosing the Right Projects. Designing Selection Processes for North-South Research Partnership Programmes)37 was concerned with selection criteria for North-South research partnership programmes. It addressed the recurring problem of considering both scientific quality and developmental relevance in the administration of funding programmes and projects - a problem that had arisen across the joint funding ventures of the SDC and the SNSF since 1992 (Maselli et al, 2004). The KFPE coordinated a working group to develop new models and criteria for meeting these dual standards, with members from the Alliance Sud, the SDC, and the SNSF. Funding for the multi-year project was secured from the International Cooperation in Education (IZB, University of Teacher Education in Zug), the SCNAT, the SDC, the SNSF, and the SER.

The Echanges Universitaires and Jeunes Chercheurs programmes

The questions of impact and peer review of North–South research projects also occupied the KFPE in practical ways during this phase in its history. In 2001, the SDC entrusted the KFPE with the administration of two research funding

³⁵ Maselli D, Lys JA, Schmid J (2004) Improving Impacts of Research Partnerships. Geographica Bernensia, Bern.

³⁶ The initial group included the Danish International Development Agency (DANIDA), World Bank, Danish Ministry of Foreign Affairs, Netherlands Development Assistance Research Council (RAW00), Economic Research Forum for Arab Countries, SDC, and the International Fund for Agricultural Development (IFAD) (Maselli et al., 2004).

³⁷ Sieber P, Braunschweig T (2005) Choosing the Right Projects. Designing Selection Processes for North-South Research Partnership Programmes KEPF Rem

schemes, Echanges Universitaires and Jeunes Chercheurs. These funding programmes supported field expenses of graduate and postgraduate students and exchange visits for North–South research partners. The KFPE continued to administer these programmes until they were discontinued during the review of the SDC's research policy and portfolio in 2011.

The Echanges Universitaires and Jeunes Chercheurs programmes were extensively used and widely appreciated by the Swiss research community and their overseas partners. Their application procedures were straightforward and accessible to a wide spectrum of disciplines and researchers. The record shows that research grants by these programmes often served as seed money for launching new joint research projects or for developing joint project applications to the SNSF, the EU, and the European & Developing Countries Clinical Trials Partnership (EDCTP). By providing funds for the early project development phase, in which partners jointly develop research questions and set objectives, the two programmes filled critical gaps in the Swiss research funding landscape. Funds for this phase of North-South research partnerships are typically scarce and the discontinuation of this funding scheme subsequently left a critical gap in the Swiss funding landscape of North-South research.

Towards the end of this phase

At the end of this phase of North–South research in Switzerland, the prospects for such research were excellent, and the KFPE was well positioned to continue to promote research partnerships. The KFPE had been actively involved in the NCCR North-South. The SDC had entrusted the KFPE with the administration of two funding schemes, and the SDC's research policy of 2002 had taken up the KFPE guidelines for research partnerships. Towards the end of this phase, the SDC was evaluated and instructed to revise its research policy and organisational structures. Apart from this, there were few signs that the science policy and development policy environment was about to move into a period of uncertainty that would affect the KFPE's activities.

In fact, the signs on the science policy side pointed into a promising direction. For the first time, Swiss international science policy had started shifting its attention to scientific research cooperation with emerging and developing countries. Following Switzerland's full association with the FRPs of the EU in 2004, the Swiss Federal Council decided to expand Swiss cooperation with developing and transition countries in 2005. Several new initiatives were launched by the State Secretariat for Education and Research (SER), including two pilot programmes for bi-

lateral research cooperation with China (2004) and India (2005), and the location of a Swissnex hub in Singapore (2003). Accordingly, high hopes were set for the ERI Dispatch 2008-2011 to include North-South research. Indeed, the Dispatch allocated funds to the SER to fund bilateral programmes with selected transition countries and for the first time included funds for research cooperation outside the OECD. Nevertheless, apart from these funds, research cooperation with developing countries was hardly considered in the Dispatch, save for the continued support of the research centres in Côte d'Ivoire and Tanzania. Furthermore, the reasons given for the expenditure on bilateral research programmes with selected emerging countries related to international competitiveness and access to information rather than to their problem-solving capacities for addressing global challenges.

2.4. Policy intermezzo, 2009 to 2012

Between 2009 and 2012, the KFPE revised the 1998 Guidelines for Research Partnerships with Developing Countries. As in 1998, the commission again carried out a participatory process with project funds from the SNSF and the SDC. After multiple revisions and an international review process, 'A Guide for Transboundary Research Partnerships. 11 Principles, 7 Questions' was published and launched at the International Conference on Research for Development in Bern in 2012. In the same year, Marcel Tanner and Bruno Stöckli handed over the presidency of the KFPE to Laurent Goetschel.³⁸

During this period, the KFPE's planning activities were delayed by uncertainties in its development policy and science policy environments. After the first decade of the new millennium, the SDC undertook a lengthy process to revise its research policy and discontinued its support of the two funding schemes that had been administered by the KFPE since 2001, Echanges Universitaires and Jeunes Chercheurs. The Swiss science policy community was immersed in the challenge of revising the first Research Act of 1983 to overhaul the terms and responsibilities of its science agencies and research institutions. In addition, the NCCR North-South was nearing its end, and the question of possible follow-up programmes loomed large.

With the passing of the Research and Innovation Promotion Act (RIPA, 2012), the Higher Education Promotion Act (HEdA) of 2011, and the publication of the SDC research policy in 2012, this three-year transitory phase came to an end. By 2012, the SDC and the SNSF had launched a

³⁸ Prof. Laurent Goetschel was director of swisspeace, which at the time was located in Bern.

new large programme to be funded jointly over the next ten years, the Swiss Programme for Research on Global Issues for Development (r4d programme). The Swiss State Secretariat for Education, Research and Innovation (SERI) formulated an international strategy for education, research, and innovation in 2010, but without consulting the funding agencies and the Swiss research community (SERI, 2010).

In addition to the uncertain science and development policy environments, two of the four academies³⁹ of the Swiss Academies of Arts and Sciences (a+) decided to discontinue their financial support as of 2012, so the KFPE's funding model had to be revised. As a result, the KFPE underwent a series of planning exercises during these three years in which the a+, the SDC, the SNSF, and the KFPE's members and associated institutions discussed the commission's role and future mission. A new model was agreed on between the SCNAT, the SDC, and the SNSF, in which they would each provide core funding of CHF 50,000 to the KFPE starting in 2013. In addition to the core funds, the SDC had also agreed to fund a portfolio of specific activities under a separate contract that would last from April 2012 until March 2015. Furthermore, the KFPE's associated institutions would pay a compulsory annual membership fee starting in 2012. By the end of this phase, new statutes had been issued by the SCNAT to adapt the core mission and tasks of the KFPE to the new model.

Despite its uncertain environment, the KFPE accomplished the important milestone of reviewing the guidelines and publishing them anew as 'A Guide for Transboundary Research Partnerships. 11 Principles, 7 Questions'. In parallel, the KFPE strengthened its ties at the SCNAT through joint projects with the Network for Transdisciplinary Research (td-net) on Sustainable Development in Research and Teaching in Swiss Higher Education Institutions and with ProClim on Global Change in Developing Countries why should we care?, jointly funded by the SDC and a+. Expert advice from the commission continued to be in demand for the design and evaluation of proposals, for giving strategic advice, and for drafting statements and recommendations. For example, the KFPE issued fact sheets in preparation for the United Nations Conference on Sustainable Development, Rio+20, commented on the SDC's policy review, and organised a learning event on the KFPE principles for the new r4d programme.

During this phase, the KFPE engaged in attempts to find a follow-up initiative that would build on the achievements and networks of the NCCR North-South. In particular, it put forward the idea of a 'Southern Network' to promote North–South research and education. Despite several proposals and high-level meetings, this idea was unable to find support in the science policy and development policy environments of the day.

2.5. Resumption, 2013 to 2019

Major decisions were made in the previous phase that would impact the future of North-South research in Switzerland after 2013. The NCCR North-South had been successfully completed but the idea of a 'Southern Network' had not taken root. Two separate large funding programmes would be run from this point on: the Swiss Programme for Research on Global Issues for Development (r4d programme), financed jointly by the SDC and the SNSF, and the bilateral research programmes with selected emerging countries, funded by the SERI. The bilateral research programmes' main funding instrument, the Joint Research Programmes (JRPs), had been moved from the Leading Houses at higher education institutions to the SNSF and were left with only a few small funding schemes and coordinating responsibilities. The ESKAS scholarships continued to be awarded by the SERI. These decisions, however, did not bring an end to the uncertainties for the North-South research communities.

The implications of the Higher Education Act of 2011 (HEdA) and the Research & Innovation Promotion Act of 2012 (RIPA) for the Swiss landscape of funding agencies and research institutions were uncertain. In addition, a far-reaching shift took place in federal administration when the SER was transferred from the Federal Department of Home Affairs to form the new State Secretariat for Education, Research and Innovation (SERI) at the new Department of Economic Affairs, Education and Research (EAER) in 2013. Federal administration and its affiliated agencies were in the process of adapting to the new distribution of tasks. The topic of North–South research was not top of their agenda.

By the end of 2012, the KFPE had developed new statutes and secured a financial commitment in principle from the SDC and the SNSF, as well as membership fees from its associated institutions. The SDC provided additional funds for the KFPE to run a portfolio of selected activities from 2013 to 2015, such as organizing conferences, workshops, research fairs, and learning events for Southern researchers, and creating a database. The SDC evaluated these activities in an externally commissioned report.

As part of this portfolio, the KFPE worked with the SDC to organise a conference on behalf of the r4d programme

and the Council on Health Research for Development (COHRED) on transboundary research partnerships; administered application procedures for learning events for researchers in developing countries; and organised two research fairs with several workshops with the SDC on transboundary research partnerships in 2013 and 2016. It partnered with the International Graduate School (IGS) North-South at the University of Bern - a legacy of the NCCR North-South - to establish a database of institutions that addressed questions of development and were involved in research partnerships. The KFPE also organised several public events on the occasion of its 20th anniversary in 2014, and partnered with other SCNAT fora to carry out joint projects and activities. The commission initiated a project on Global Change in Developing Countries - why should we care? in partnership with the Pro-Clim forum and the multi-year Access and Benefit Sharing Project with the Swiss Biodiversity Forum.

In 2015, while the KFPE was awaiting the final report of the SDC's evaluation, the commission initiated a new funding scheme for North-South research in partnership with the Rectors' Conference of the Swiss Universities of Applied Sciences (KFH). The newly established Swiss Conference of Higher Education Institutions, swissuniversities, had been instructed by the new HEdA to support actions that involved all three types of higher education institutions in Switzerland - universities, universities of applied science, and universities of teacher education. In response to a call for projects by swissuniversities, the KFPE and the KFH further developed an idea to strengthen North-South research, and together they submitted a pre-proposal for the swissuniversities Development and Cooperation Network (SUDAC). After the pre-proposal was approved in May 2015, they submitted a full proposal at the end of the year. In May 2016, swissuniversities decided to support the project with CHF 3.5 million for four years, with funds provided by the SERI and matching funds from the participating higher education institutions. The KFPE was instrumental in managing this application process, facilitating the proposal development phase, and putting together a consortium of participating higher education institutions.

Despite its relatively modest financial backing in comparison to previous large North—South research programmes, the SUDAC's objectives and design merit special attention. The SUDAC programme follows four core objectives: to improve the framework conditions for Swiss academic institutions active in the fields of education, research, and innovation on global issues; to enhance cooperation between different types of Swiss academic institutions working on global issues; to improve the efficiency of educational and research partnerships with academic institutions of the Global South; and to contribute to excellen-

cy and innovation in research and education on global issues. The programme is organised around two funding schemes: ten Consortia for Education and Research (COFERs) which group different types of Swiss academic institutions with their partner institutions in the Global South, and Clusters of Cooperation in the Global South (CLOCS) which are to serve as regional hubs and contact points for regional cooperation. The CLOCS collect, analyse, and share data, information, and knowledge on the major thematic realms as defined in the UN 2030 Agenda for Sustainable Development.

At the time of writing, a follow-up programme for the first phase of SUDAC for the years 2021–2024 is awaiting approval by swissuniversities, depending on the final ERI Dispatch 2021–2024 currently before Parliament. The second phase will focus on supporting CLOCS activities and consolidating its programme structure and funding. After this period, however, swissuniversities will provide no further support.

Since the official launch of the SUDAC programme, the KFPE has assumed an advisory role and has assisted in organizing and coordinating activities of the programme. It co-organised two conferences with swissuniversities: in 2017 on opportunities, challenges, and risks of going digital in research and education partnerships, and in 2019 on research networks as pathways to achieving sustainability.

During this phase the KFPE continued to promote its principles for North-South research partnerships as before, and moved to use social media for their dissemination. In 2016, the KFPE developed a series of short videoclips on the KFPE principles and questions. In participation with swisspeace, the commission issued various publications and guidelines on the topic of conflict sensitive research. Between 2017 and 2020, the KFPE also developed a new Massive Open Online Course (MOOC) in cooperation with the td-net and several Swiss universities. In 2018, to mark its upcoming 25th anniversary, the KFPE produced a video on research partnerships and shared these over YouTube and Facebook. This same year, the KFPE organised a joint workshop with UK Research and Innovation (UKRI) on Working in Effective Partnerships to Address Sustainable Development Goals, and subsequently published recommendations on how research funders could support and promote equitable partnerships and research translation. 40

The KFPE continued to issue various fact sheets in cooperation with other groups at the SCNAT, such as on

⁴⁰ UKRI-KFPE Workshop: Working in Effective Partnerships to Address Sustainable Development Goals 12–14 September 2018, Dar es Salaam, Tanzania. Workshop report.

'Global Change and Developing Countries: why should we care?' (with ProClim), on Health and Global Change⁴¹ (with ProClim and SwissTPH), commodity trading⁴² (with ProClim, the World Trade Institute [WTI] of the University of Bern, and the Institute for Business Ethics [IWE] of the University of St. Gallen) and on the regulation of multinational companies in Switzerland.43 It also contributed to statements on behalf of SCNAT, such as on Nagoya (with the Swiss Biodiversity Forum, 2015), on the draft International ERI Strategy (2017), and on the draft Dispatch on Switzerland's Strategy for International Cooperation 2021–2024. It orchestrated a joint publication in a special issue of GAIA on Research for Sustainable Development Goals with 14 authors, and solicited proposals by the Swiss North-South research community to submit ideas for research in support of the SDGs. It also developed Guidelines for Conflict Sensitive Research in a participatory joint project with swisspeace that was co-funded by the SDC.

In addition to print publications and statements, the KFPE also organised several events, such as the Research Fairs on behalf of the SDC (2013 and 2016) and the SDC Learning Events for Researchers from Developing Countries. The KFPE also participated in the fourth International Conference on Research for Development in Bern in 2017 (in collaboration with the COHRED, the UK Collaborative on Development Sciences (UKCDS), and the COHESION project of the University of Geneva). It has also continued to jointly run the database with the International Graduate School North South.

⁴¹ SCNAT Factsheet, Health and global change in an interconnected world – Concerns and responsibilities for Switzerland (2015).

⁴² SCNAT Factsheet, Making the Commodity Sector Work for Developing Countries – Local Impacts, Global Links, and Knowledge Gaps (2016).

⁴³ SCNAT Factsheet, Small state, big companies. Rules for economic globalisation and the role of Switzerland (2020).



3. Achievements of the KFPE

By any measure, the historical record of the KFPE's activities is remarkable in number and variety. The commission's activities have involved diverse stakeholders, addressed multiple topics and problems, and spanned geographic scales. They appear all the more notable in view of the commission's constitution as a loose network of members and associated organisations and the comparatively small budget at its disposal. Furthermore, much of its conceptual work and most of its operations were managed by the holder of a single part-time position, with committee members working on a voluntary basis or with a temporary mandate. The following illustration gives an indication of the areas of activity in which the KFPE has promoted North–South research partnerships over the past 25 years.



Figure 1: Areas of activity of the KFPE.

The KFPE's past achievements in these areas of activity may be portrayed along six themes, which we explore below:

- → Quality of research
- → Large research programmes
- → 'to sensitise', 'to mediate'
- → Community building
- → Research evaluation
- > Research reputation and scientific capital

3.1. Quality of research

'The present-day situation of R&D for development in Switzerland is unsatisfactory. Measures must be taken to ensure that its significance is increased and its quality is improved in international comparison.'

(Graf & Zinkl 1994: 82)44

The KFPE was established to contribute to a broader paradigm shift in research cooperation with developing and transition countries in the 1990s. Transforming prevailing research practices, traditions, and conditions required new concepts and models (Graf & Zinkl 1994: 85). Research quality was considered one of the key transformative challenges. Research cooperation with developing and transition countries had to live up to a double burden of standards: scientific quality criteria and developmental relevance. In simple terms, the former emphasises scientific method and journal publishing whereas the latter underscores impact and capacity building. Accordingly, North—South research was typically categorised as applied research and therefore suffered from quality bias.

The KFPE Guidelines of 1998 and 2012 were developed to address these issues of quality. They have provided practical and conceptual guidance for many areas of activity of the KFPE. In many ways, they have formed the centrepiece of the KFPE's work because they spell out the parameters by which the KFPE goes about its mission to promote North–South research. By setting standards and best-practice principles to guide the design, evaluation, implementation, and assessment of North–South research partnerships, they offer ways to address the quality conundrum of North–South research partnerships.

Over 25 years, the KFPE has contributed to the quality of North–South research partnerships by implementing the Guidelines through its advisory activities. Its annual reports record a wide range of advisory activities that include formal and informal services to researchers, stakeholders, institutions, and governmental and non-governmental agencies in Switzerland and abroad. The KFPE has participated in countless working groups, statements, meetings, commentaries, strategy building processes, and evaluation committees concerned with the quality of North–South research partnerships. It has mediated contacts and advised on appointing international representatives on behalf of

the SCNAT and the academies. The commission has also provided expertise to the SCNAT in joint projects with other panels such as ProClim, the Network for Transdisciplinary Research (td-net), or the Swiss Biodiversity Forum.

Both versions of the Guidelines were addressed to a wide range of practitioners including researchers, partnership projects, policymakers, development organisations, and international organisations and accordingly, have been taken up in a wide range of settings. They have been referenced in codes of conduct, training courses, learning events, conferences, proposals, application and evaluation procedures, funding schemes, and research strategies. International organisations and agencies such as the VW Foundation, the Wellcome Trust, and the European & Developing Countries Clinical Trials Partnership (EDCTP) have explicitly referred to the KFPE Guidelines or have solicited the advice and expertise of the KFPE.

Other agencies have proposed codes of conduct or best-practice guidelines for North–South research over these years, but the KFPE Guidelines appear to have been exceptionally successful by international measure. Both versions of the Guidelines were translated into several languages and distributed widely in Switzerland and internationally. The second version was converted into a series of short video clips in 2016, to raise public awareness over YouTube and Facebook, and two years later, the KFPE issued another video to give a brief review and outlook of transboundary research partnerships.⁴⁶

The exceptional success of the Guidelines, however, cannot simply be attributed to effective communication and dissemination strategies. Rather, their widespread use and reputation may be owed to their roots in consultative and participatory processes that involved the science policy, development policy, and research communities. The guidelines and principles were not simply developed in a desk-based literature review. Instead, they were solidly grounded in the experiences of these three communities and in processes of mutual learning, and they were tested and discussed in working groups, workshops, conferences, and other consultative processes, at considerable time and effort, over several years. One of the achievements of the KFPE was to mobilise and motivate a network of participants for these projects.

Parti
44 'R&D for development' (Research & Development) has been retained in
these quotes, as the original German phrase employed by the authors is
'Entwicklungsländer-relevante F&E' (Forschung & Entwicklung), although
this subsequently came to be known as 'research for development'.

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⁴⁵ A few examples to illustrate this uptake: The KFPE principles were referenced in the SNSF international cooperation strategy of 2012 (for the years 2013–2016); they were used to design, carry out, and evaluate the NCCR North-South; they are listed as guiding principles for researchers participating in the r4d Programmes; they need to be considered for SUDAC proposal applications; and they are applied in the new Open Online Course on Transdisciplinary Research offered by the SCNAT.

^{46 &#}x27;Out of Laboratories: Research Partnerships in a Changing World' (with Bruno Stöckli) https://youtu.be/LauuQJhf4Ho.

Furthermore, these processes were closely coordinated with the large national North–South research programmes of the day. Both versions of the guidelines were published in the final years of the SPPE Module 7 and the NCCR North-South and were also financed by their funding agencies, the SNSF and the SDC.

The impact of the KFPE on the quality of North–South research cannot be quantified. However, the continued solicitation of the commission's expertise over the past 25 years speaks for itself. Most recently, it was exemplified in the joint workshop of the KFPE with UK Research and Innovation (UKRI) in Tanzania to develop recommendations on Promoting Fair and Equitable Research Partnerships to Respond to Global Challenges.⁴⁷ Much laborious but high-impact work of this kind happens behind the scenes and remains largely unrecognised.

3.2. Large research programmes

'The above findings indicate a national need to shape and organise Swiss R&D for development.'

(Graf & Zinkl, 1994: 85)

The KFPE was established in 1994, less than two years after the launch, in 1992, of the first large Swiss North—South research programme. Ever since, the commission has been involved in the large research programmes that have shaped the Swiss North—South research landscape over

the past 25 years. To appreciate this involvement, it is useful to briefly sketch the circumstances surrounding North–South research funding in Switzerland during these years.

North-South research in Switzerland has depended on a model of federal research promotion characterised by large research programmes of fixed-term duration. Three major North-South research programmes have been run in Switzerland since the 1990s: the SPPE Module 7 (1992-1999), the NCCR North-South (2001-2013), and the r4d programme (2012-2022). A fourth federal North-South programme, bilateral research programmes with emerging countries, was initiated in 2008, not limited in time but subject to regular approval within the scope of regular federal research expenditure. All of the fixed-term programmes have relied on cooperative funding from the SDC and the SNSF, while the bilateral programmes have been funded by the SERI by way of the last three Dispatches on Education, Research and Innovation (ERI Dispatches) presented to the Swiss Parliament for approval every four years. Several other important funding programmes have not been large in monetary terms but in terms of their impact on the Swiss research community, such as the Echanges Universitaires, Jeunes Chercheurs, and SUDAC programmes.

Except for the bilateral research programmes, the KFPE (and its forerunner, the PRDC) was actively involved in all of these programmes across all stages of their life cycle and at several levels of their institutions. The commission assumed various roles in these programmes: it initiated and coordinated participation in their project development phases (SPPE, NCCR North-South, SUDAC); contributed to the conceptual and procedural design of the programmes (SPPE, NCCR North-South, SUDAC); provided expertise on programme and project design (NCCR North-South, r4d Programme, SUDAC) and advised on

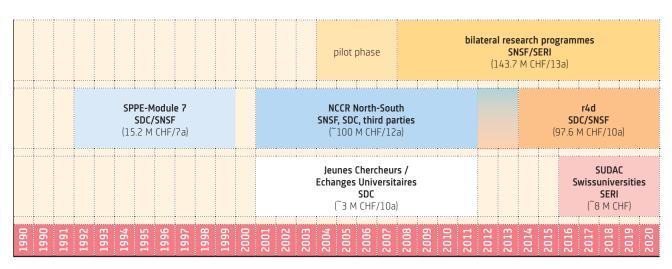


Figure 2: Overview of the large programmes in North–South research in Switzerland to date

⁴⁷ The government funding agency UKRI is currently running a £1.5 billionstrong Global Challenges Research Fund (GCRF) to support cutting-edge research that addresses the challenges faced by developing countries.

evaluation and project selection criteria as well as membership in advisory and evaluation committees (r4d programme, bilateral research programmes).

Over a period of ten years, the commission administered a funding scheme to support North–South research exchange and field work on behalf of the SDC (2001–2011). A few years ago, the KFPE joined forces with the KFH to initiate the SUDAC and to coordinate the proposal development process. The commission also engaged with the pilot phase of the fourth large North–South research programme, the bilateral research programmes funded by the SERI – and its Guidelines are referenced in some of the calls for applications for small grants administered by its Leading Houses.

The impact of the KFPE's involvement in the three generations of large North–South programmes cannot be quantified. All of these programmes have had to battle with questions of quality because their evaluation procedures have had to meet the double standards of science and development cooperation. Historical records demonstrate that the success of all three programmes depended on extensive preparatory work, networking, organisation, and management.⁴⁸ These records suggest that the coordinating and mediating services of the KFPE, as an independent agency of the Swiss academies, have been of great

value to the quality of three of the four large Swiss North–South programmes. The commission's involvement in the main Swiss vehicle for North–South research promotion has been an effective route to implementing the KFPE's mission and objectives.

3.3. 'to sensitise', 'to mediate'

'This research issue needs to be marketed in politics, in the research community, in the private sector and, in some cases, in development cooperation.'

(Graf & Zinkl 1994: 85)

The Swiss Strategy for the Promotion of Research in Developing Countries of 1993 anticipated the KFPE to be occupied with two main tasks; 'sensitizing' the Swiss scientific community to 'the scientific research needs of developing countries' and supervising the proposed 'Central Bureau of Information' (SDC and SAS, 1993: 13). Both these responsibilities were taken on by the KFPE without,

however, formally establishing a Central Bureau. The initial scope of the first task was soon extended to include 'the research community, policymakers, and the public'. Current statutes of the KFPE emphasise the commission's collaboration with Swiss research policy and relevant groups and committees (SCNAT, 2013).

To implement these tasks efficiently and effectively, the KFPE has continuously 'mediated' - in the sense of forming links - and developed and revised its communication strategy. The channels of communication and activities employed by the KFPE over the years are too many to list but they shine through the chronicles of the KFPE in the previous chapter. They include a large variety of brochures, newsletters, fact sheets, press statements and conferences, newspaper articles, newsletters and bulletins, databases, conference proceedings, workshops, video clips, presentations, research fairs, parliamentary briefings, scientific articles, and book publications. They confirm that the KFPE has acted as a switchboard, point of contact, forum, think tank, network, or platform - nationally and internationally. The workload on the secretariat to manage these activities has, at times, required additional temporary part-time employment. Most recently, the commission's communication channels have been broadened to include social media.

The activities carried out by the KFPE 'to sensitise' and 'to mediate' for the promotion of North–South research partnerships also served to build communities for such partnerships, as described in the next section.

3.4. Community building

'As concerns R&D for development, Switzerland is poorly interconnected nationally and internationally.'

(Graf & Zinkl 1994: 19)

In the early 1990s, a national assessment of Swiss scientific cooperation with developing countries determined that several universities and higher education institutions entertained contacts with a wide range of developing countries (IUED, 1992). 49 The report, however, concluded that their activities and projects were dispersed, typically short lived, barely involved communication and coordination, typically resulted in scientific publications by Northern researchers and their institutions, and were primarily focused on the interests of Swiss researchers.

⁴⁹ The study reported that more than 250 Swiss institutions and more than 700 Swiss researchers were participating in around 370 research projects

These initiatives hardly made it to the attention of the international science community. In addition, the marginal position of these scientists within the larger Swiss scientific community was a cause for concern. The need to strengthen the Swiss community of researchers active in research with developing countries formed part of the rationale to establish the KFPE.

Building North-South research communities may be considered one of the main achievements of the KFPE. From the beginning, the KFPE considered the quality of research partnerships with developing and emerging countries across Northern and Southern contexts as a cornerstone of North-South research. Accordingly, the commission's community-building activities were not confined to the exchange and dissemination of information. Communities are bound together by traditions, by ways of going about their business. The KFPE started out with great capital in this respect: its predecessor institution, the PRDC, had carried out a three-year participatory process to develop the Swiss Strategy for the Promotion of Research in Developing Countries. This process had required coordinating and managing representatives from a wide range of organisations, and motivating their (voluntary) participation over a considerable period of time. The achievements of the PRDC set the tone for subsequent partnership projects of the KFPE across the research and policy communities.

Researchers working in the field of North–South research face a dual marginality within the broader landscape of science: their inter- and transdisciplinary research does not fit neatly into disciplinary faculty structures and in addition is considered of lesser quality due to its focus on the global South. Providing a national platform for these researchers to team up as a community with joint interests and common obstacles has been of great importance to North–South research in Switzerland.

Of course, by its very composition of associated members, the KFPE has served to attract and hold together a community of practitioners engaged in North–South research. Several KFPE presidents were affiliated to interdisciplinary research centres at Swiss Universities; to the Swiss Tropical and Public Health Institute (Swiss TPI) at the University of Basel, the Centre for Environment and Development (CDE) at the University of Bern, and the Graduate Institute of International and Development Studies (IHEID) at the University of Geneva. All of these research centres already existed before the establishment of the KFPE, but the commission surely contributed to their standing in the Swiss research community.

Furthermore, the KFPE has played a vital role in attracting a community of early career researchers to North–South issues and research problems by providing opportunities for North–South exchange. The Echanges Universitaires and Jeunes Chercheurs programmes, administered by the KFPE between 2001 and 2011 on behalf of the SDC, played a significant role in this endeavour, as did the many training events, workshops, and conferences organised by the KFPE.

Lastly, the KFPE has continuously provided incentives and opportunities for researchers to team up in research groups. The large North–South research programmes and the SUDAC programme are cases in point. Another example is the recent call by the KFPE for submissions of proposal abstracts on ideas to contribute to the Sustainable Development Goals. The call aimed to make visible the motivation and innovative potential of this particular spectrum of the Swiss research community, and the need for more funds. But it also served to build smaller research groups and to strengthen ties across the national research community⁵⁰.

Community building is an essential precondition for North–South research partnerships with developing countries. This process requires practical activities and coordination but also involves joint conceptual work. Contacts, networks, and friendships amongst the North–South research community, within and across Switzerland and the global South, were of essential importance to the success of the proposals for large-scale research programmes, when time was scarce and initiatives needed to move quickly. Given the continued marginal status of North–South research in the national landscape of science and its exclusion from national research policy in Switzerland, this achievement is of especial significance.

3.5. Research evaluation

'Due to the complexity of R&D for development, the expert systems concerned with its promotion need to be opened up.'

(Graf & Zinkl, 1994: 83)

The quality of scientific work is measured through peer review processes. The first gateway for peer review is the evaluation of the scientific research proposal. Traditional scientific criteria, standards, and norms have guided these processes for many years. With the change in paradigm in the 1990s towards research partnerships, it became increasingly clear that North–South research required additional criteria to certify quality standards.

⁵⁰ The call solicited 55 proposals from 22 research institutions (https://naturwissenschaften.ch/organisations/kfpe/sdg).

The KFPE's work over the past 25 years has contributed considerably to improving evaluation procedures and programmes of North–South research partnerships in Switzerland and other Northern countries. It has provided conceptual guidance, practical advice, and administrative and organisational assistance to a number of problems that cause systemic obstacles for North–South research. Typically, the commission has not offered these services as a one-directional flow of expertise, but by initiating and managing participatory projects.

More specifically, the KFPE has developed evaluation criteria for joint North-South research projects and programme design (e.g. guidelines for research partnerships, research impact study, selection criteria for research projects, guidelines for conflict sensitive research). Various Swiss agencies and institutions have solicited the expertise of the KFPE over the years, including the SDC, the SNSF, the SERI, higher education institutions, and researchers developing proposals to apply for funds. The KFPE Guidelines have been published as guidelines for research applications on the website of various funding agencies and programmes, such as the SUDAC or the new SPIRIT programme (Swiss Programme for International Research by Scientific Investigation Teams) of the SNSF. It has managed three programmes to distribute seed funds for early career researchers and short North-South research visits to kick-start cooperation and project proposals on behalf of the SDC (the Echanges Universitaires, Jeunes Chercheurs, and Learning Events programmes).

Evaluation criteria and standards remain a critical problem in the advancement of North-South research. The dual consideration of scientific and development-related criteria in Switzerland pose persistent challenges to the Swiss landscape of research promotion. For example, the best-endowed North-South research programmes in Switzerland, the bilateral research programmes of the SERI, currently follow traditional peer review criteria for scientific research and list no development-related requirements. Its major funding programme for Swiss research cooperation with Brazil, Chile, China, India, Japan, Korea, Russia, and South Africa, the Joint Research Projects (JRPs), declares scientific evaluation criteria only.⁵¹ Other funding schemes for North-South research refer, pro forma, to development-related guidelines in their calls for proposals, but then go on to restrict their proposal

evaluation criteria to traditional measures of scientific excellence. Another problem is that North–South research projects typically require specific additional funding categories to fulfil development-related standards.

Difficulties in the evaluation of North–South research projects are widely acknowledged and have been known for more than 20 years, although there are promising signs of late. New forms of scientific practice outside the traditional boundaries of academic disciplines and involving a variety of stakeholders outside academia have started gaining acceptance, and research funding agencies have selectively started broadening their evaluation criteria accordingly. New funding programmes for promoting North–South research across several European countries are further indications of progress on this matter.

However, evaluation procedures for North–South research projects and programmes in Switzerland and their effect on the quality of North–South research have not been reviewed and analysed since the early 1990s. As a result, little is known about potential gaps in the current Swiss funding landscape for North–South research.

3.6. Research reputation and scientific capital

'R&D for development in Switzerland is not taken seriously by the rest of the national research community.'

(Graf & Zinkl, 1994)

'Switzerland is currently not actively engaged in the field of R&D for development and has no leading-edge research to show in this area; instead, its international position is characterised by mediocrity.'

(Graf & Zinkl 1994: 19)

Studies undertaken on Swiss research with developing countries in the early 1990s concluded that the professional status of this spectrum of the national scientific community was precarious. Neither had the country built an international reputation in North—South research, save for a few university centres and institutes such as the STI, the IUED, or the Institute of Geography at the University of Bern. Furthermore, when compared to countries such as Canada and Sweden, or the European Community at the time, Switzerland appeared to lack the necessary scientific capital to attain international visibility and reputation in this area of research (SDC and SAS, 1993).

⁵¹ Some of the smaller funding schemes run by the Leading Houses of bilateral research programmes reference the KFPE guidelines but their application in the project evaluation procedure cannot be verified. Furthermore, the evaluations of the bilateral research programmes (commissioned by the SERI in 2011 and 2020), too, have been carried out according to scientific criteria only, and have not considered the programme's achievements with regard to their impact in Southern contexts or their quality of partnership.

The KFPE contributed significantly to changing this situation, by leveraging the standing and reputation of North–South researchers in the Swiss scientific community and internationally. Twenty years down the road and as the NCCR North-South came to an end, the dire situation of the early 1990s had been turned around and Switzerland enjoyed an excellent international reputation as a pioneer in North–South research partnerships. This scientific capital is not merely a matter of competitive standing, but also provides an important point of attraction for Southern research partners.

The historical record shows that the KFPE was a key player in this process and acted as a trendsetter and best-practice and standards-bearer. Once more, it is important to point out that this achievement is not simply due to good administration, coordination, and communication but above all, to conceptual work of outstanding scientific quality. The wide references to the guidelines and principles for research partnerships in Switzerland and across the globe are not due to a clever marketing strategy, but testify to their quality. The high quality of the KFPE's work also shines through the many international invitations issued to the KFPE and the public performances of its presidents, members, and heads of secretariat at these events. To be sure, the KFPE's international reputation is essential for its operations, especially with regard to acting as a point of entry to attract researchers and institutions at home and abroad, especially from the global South.

The reputation of Swiss North—South research hinges upon the availability of funding opportunities and appropriate funding instruments. By promoting the three large North—South research programmes and the SUDAC, and through its administration of the Echanges Universitaires and Jeunes Chercheurs programmes, the KFPE has indirectly but significantly furthered the research reputation and scientific capital of the Swiss community of North—South researchers.

The international landscape of funding opportunities and funding programmes for North–South research has

changed significantly over the past decade. As already mentioned above, new funding instruments and North-South research policies have been launched in several European countries and elsewhere to respond to new constellations in the global economy of knowledge. These new initiatives and their implications for Switzerland's North-South research funding programmes and instruments have not yet been assessed strategically. There are numerous signs for the need to adapt the Swiss funding landscape for North-South research to international developments. Over three decades and three generations of funding programme, Switzerland has continued to invest public money into North-South research programmes that are large and of limited duration. The significance of this spectrum of research to the country is no longer in any doubt. Instead, the new important question is whether or not the model of fixed-term, large-scale research programmes is the best vehicle to promote this type of research in future.

The recent evaluation of the largest Swiss North–South research programme, the SERI's bilateral research programmes, has presented evidence for less conducive conditions for North–South research in Switzerland than in comparable European countries. Compared with similar programmes in selected European countries, the evaluation concluded that the Swiss bilateral research programmes issue calls for proposals at a much lower frequency, stipulate stricter formal requirements, and are not available to Southern partners working abroad (IRIS group, 2020).⁵²

Lastly, its institutional home at the Swiss Academies of Arts and Sciences in general, and the SCNAT in particular, has been an indispensable asset to the KFPE's reputation and its efforts to promote the national and international reputation of North–South research in Switzerland.

⁵² The report benchmarks the bilateral research programmes against similar programmes in selected European countries. The evaluation concludes that the conditions for financing joint/bilateral research ideas under the general research funding schemes are better in Denmark, Sweden and, for some Councils, the UK than they are in Switzerland (IRIS group, 2020:81).



4. Discussion and conclusion

What has been the role of the KFPE in the development of North-South research in Switzerland? What lessons can be drawn from the KFPE's history for North-South research promotion in Switzerland more generally?

The history of the KFPE is exceptional by international comparison. The commission's institutional affiliation to the Swiss Academies of Arts and Sciences a+, rather than to national funding agencies or federal departments, has afforded the KFPE a unique position at the interface of the research and policy communities. However, this privilege has come at a cost: the KFPE has depended on the support of several agencies with sometimes conflicting missions. As a consequence, the KFPE has had to manage multiple lines of accountability. Much time has had to be dedicated to communicating and mediating across institutional cultures. Over a quarter of a century, the commission has managed to promote North-South research with modest financial resources in an environment of competing demands, diverse stakeholder interests, and conceptual challenges. Why take on these difficult challenges? Would it not be easier to find a more stable and permanent institutional affiliation on either side of the research and policy communities involved? The field of Science & Technology Studies (STS) offers a set of analytical terms to portray the history of the KFPE at this intersection and to pursue answers to the above questions.

4.1. The KFPE as a boundary organisation between the research and policy communities

The term boundary organisation was introduced to identify and explain activities and knowledge transfer at the interface of research and policy communities (Guston,1999 and 2001; Leith et al. 2016: 379). The KFPE qualifies as boundary organisation, because navigating the difficult waters shared by the science policy, development policy, and research communities has been the commission's core competence. Dealing with challenges at this interface has been the livelihood of the KFPE. In other words, the commission can only effectively pursue its mission to promote North–South research by positioning its activities in the midst of this field of tensions. Boundary organisations do not pursue stability and permanence. Neither do they simply facilitate communication between different stakeholder groups.

The boundary organisation provides incentives and opportunities for collaboration between the research and policy communities. These can take on a variety of forms, such as joint projects, events, conceptual models, or classification systems. In STS terminology, these incentives and opportunities are referred to as boundary objects (Star and Griesemer, 1989). Boundary objects typically mediate between different knowledge claims on a given problem and have to deal with questions of credibility and legitimacy (Parker & Crona, 2012; Gustafsson & Lidskog, 2018). The mediating processes required to satisfy these different claims are called boundary work (Gieryn, 1983). Many of the KFPE's activities may be attributed to this category.

Why are these terms useful to consider the history of the KFPE? They give names to particular properties of atypical organisations such as the KFPE which might otherwise evade our attention. The position of the boundary organisations in between the research and policy communities leaves them permanently exposed to questions of legitimacy. There is an inherent bias towards their dynamic and evasive character. Having said this, the history of the KFPE is a model example of the value of boundary work.

The KFPE's achievements are not captured by a long list of milestones, activities, and outputs alone. The commission's contributions to North-South research are cached in its boundary objects and boundary work. As a boundary organisation, the KFPE has served as a platform for providing information, for facilitating interaction between stakeholders and interest groups, and for negotiating joint projects and positions. It has built new communities at the intersection of science, research policy, and development policy - notwithstanding their differing interests, institutional objectives, and traditions. The KFPE has created boundary objects by initiating, negotiating, designing, or managing joint projects that have served as points of reference for stakeholders to find mutual interests. Its boundary objects have clustered around several topics as outlined in the chapter on the KFPE's achievements: the promotion of North-South research quality; large North-South research programmes in Switzerland; activities to sensitise, mediate, and build communities; research evaluation and research reputation. The KFPE's activities under these topics qualify as boundary work by virtue of their engagement of participants from the research and policy communities and because they are concerned with the demarcation of scientific and development-related research. The commission's institutional affiliation with the Swiss Academies of Arts and Sciences — itself positioned at the interface of science, politics, and society — has certainly provided a conducive home for carrying out this work.

Patterns in the KFPE's boundary objects and boundary work over time provide clues as to the commission's performance and impact on North—South research promotion in Switzerland more generally. They also reveal features that are particular to North—South research promotion in this country.

4.2 The KFPE's performance and impact

The following paragraphs summarise the KFPE's performance and impact on North–South research promotion that follow from the historical study of the KFPE.

The KFPE has influenced the course and quality of North-South research in Switzerland and beyond.

The history of the KFPE testifies to a substantial record of achievements that have had a bearing on the promotion of North–South research in Switzerland and abroad. The KFPE has mobilised and strengthened research communities, provided expertise on conceptual problems in North–South research, and contributed to improving the quality and capability of North–South research.

The commission played an important role in the three major North–South research programmes that have shaped the Swiss North–South research landscape over the past 25 years, including the SPPE Module 7, the NCCR North–South, and the r4d programme. The commission's work has improved evaluation procedures and programmes for North–South research partnerships and has consistently counteracted the marginal status of North–South research.

The KFPE has provided conceptual guidance, practical advice, and administrative and organisational assistance to problems that have caused systemic obstacles for North–South research for more than a quarter of a century. Notably, these accomplishments were achieved with minimal material, financial, and personnel resources.

The KFPE has generated a high return on investment with relatively minor material, financial, and human resources.

The history of the KFPE chronicles a wide range of tasks and considerable number of accomplishments. These have required a broad spectrum of competences and expertise but were accomplished with minimal institutional, material, financial, and personnel resources. When considered against the record of the KFPE's achievements and role in promoting North—South research partnerships in Switzerland, this statement is not trivial.

The KFPE's financial model has relied on core funding from the SCNAT (prior to 2006, from the individual academies of the a+), the SDC, the SNSF, its associated members, and temporary project mandates. This model has given the KFPE little scope to initiate projects and to respond to opportunities as they arise. Raising funds for relatively small project mandates requires project lead time and is time consuming and costly. On the other hand, diverse project funding sources have also fostered the KFPE's independence and credibility.

By any standard, the KFPE's historical achievements and influence on the promotion of North–South research in Switzerland demonstrate a high return on investment.

The KFPE has cultivated a new tradition of skills, competences, and expertise to promote North-South research.

The KFPE's achievements were made possible by a combination of particular skills and expertise, which were required to navigate the conflicting missions and interests of the science policy, development policy, and research communities. Rather than setting out to eradicate tensions between these communities, the KFPE engaged them in participatory processes, over and over again.

This consistent approach has shaped new practices and traditions for promoting North–South research. Skills in communication and coordination are not sufficient to work productively in such complicated settings. A spectrum of additional competences is required, such as inter- and transdisciplinary proficiency, conceptual and methodological knowledge, social skills, entrepreneurial spirit, visionary commitment, and persistence. They also need to be employed at the right time to achieve an effective balance between consultation, participation, and leadership.

The KFPE has contributed to implementing the goals of global sustainable development since the mid-1990s.

As the national agency responsible for the promotion of quality and capability of North–South research in Switzerland, the KFPE has played a significant role in this country's efforts to implement the goals of global sustainable development. The essential role of North–South research partnerships for the goals of global sustainable development have been recognised since the Rio Declaration and Agenda 21 of 1992, to which Switzerland was a signatory. Transboundary research partnerships were advocated in subsequent goals (the MDGs and SDGs) and their importance was recently reinforced in the latest Global Sustainable Development Report (UN, 2019: 124–125). Therefore, the KFPE may be considered a valuable asset to the current pursuit of the Sustainable Development Goals (SDGs).

The KFPE stands out as an asset and a showpiece enterprise for the a+ and the Swiss science policy, development policy, and research communities.

The KFPE is well-known and has established an excellent reputation at home and abroad. The commission's longevity demonstrates the high quality of its work. It has consistently managed to attract high-profile members representing the most important North–South research institutions and initiatives in Switzerland. Given the increasing significance of North–South research for global sustainable development, the KFPE sticks out as a show-piece enterprise for the a+ and an asset to the communities, agencies, and stakeholders involved in North–South research.

4.3. Specific features of North-South research promotion in Switzerland

The history of the KFPE reveals several features that are particular to North–South research promotion in Switzerland. They concern the particular model of North–South research promotion followed in this country in the past, its national strategic approach to North–South research promotion, and the federal research policy agenda and research budget.

Stop-and-go model of North-South research promotion

The history of the KFPE lays bare the general conditions for North–South research promotion in Switzerland since the mid-1990s. Three major programmes have characterised North–South research promotion in Switzerland to date: the SPPE Module 7, the NCCR North-South, and the r4d programme. They were all of limited duration and jointly financed by the SNSF and the SDC. Despite the success of these programmes, they were subsequently not transferred into the regular federal tool for research promotion, the ERI Dispatch.

All of the three large North—South research programmes had to be motivated from scratch and the outcome of these efforts was precarious up until the end. They have not followed a prescribed format or regular call and therefore have varied considerably in structure, direction, and governance. Accordingly, they have all required extensive negotiations, preparations, specifications, and special evaluations, consuming much time and work from the Swiss science policy, development policy, and research communities.

The KFPE has invested a great deal of time and effort into the national North–South research programmes and into attempts to transfer them into more permanent research promotion models. The model of the large-scale, temporary programme did not develop from strategic science policy decisions on North—South research but rather characterises the Swiss federal stop-and-go policy approach on North—South research. Over the course of its history, the KFPE and its partners have put forward various alternative models (e.g. the 'Special Programme' or the 'Southern network') to consider more permanent solutions for North—South research promotion in the Swiss research funding system.

Internationally, the three Swiss joint SDC/SNSF programmes stand out as unique, with no similar large-scale joint funding ventures on the North–South research scene. Indeed, while Switzerland has lingered with this model, other European countries have developed new initiatives and funding schemes to promote North–South research. To date, no strategic assessment and international benchmarking of this particular federal model of funding North–South research has been carried out. Looking ahead, it appears evident that the Swiss federal prototype for North–South research promotion of over 30 years begs new scrutiny and strategic consideration.

National strategy for North-South research promotion

The history of the KFPE demonstrates the potential power of a national North–South research strategy. The Swiss Strategy for the Promotion of Research in Developing Countries of 1993 led to the formation of the KFPE, guided its lines of action, and granted the commission broad institutional and political legitimacy during its first years. The commission's achievements over a quarter of a century had their origins in a group of visionary, committed, and innovative individuals from across the research and policy communities who set out to change the status quo in the 1990s.

No further national strategy on the promotion of North–South research has been formulated in Switzerland since 1993. The country's past stop-and-go model of temporary North–South research programmes has not translated into any official federal strategy, action plan, or long-term policy decisions on the promotion of North–South research in Switzerland.⁵³ Strategic orientation and guidance are required to develop alternatives to the current model. Long-lasting imprints left by the first national strategy on North–South research promotion in Switzerland suggest that broad, evidence-based participatory processes are beneficial for developing robust national strategies.

⁵³ The International Strategy on Education, Research and Innovation issued by the SERI on behalf of the Swiss Federal Council in 2018 was written by public administration officials and underwent a minor consultation procedure. The affected policy communities did not participate in drawing up the scope and content of the document and the national research community was not included in either process.

Federal research policy agenda and research budget

The history of the KFPE records almost 30 years of concerted efforts to bring North—South research onto the Swiss research policy agenda and federal research budget. However, the current categories of the federal research budget presented to the Swiss Parliament every four years through the ERI Dispatches still do not earmark federal funds for North—South research comprehensively. The failure to achieve this goal is not for lack of quality or international reputation of Swiss North—South research. On the contrary, three decades of federal expenditure on large North—South research programmes demonstrates the national importance of this particular area of research.

Yet, with a few exceptions, the focus of Switzerland's international research policies has remained with Europe and its North–South research community has generally had to apply for public funds for North–South research through temporary funding schemes. As indicated above, the model of large transitory funding structures for promoting North–South research has come at considerable cost to Switzerland. It has consumed much time of its research and policy communities that could have been invested into carrying out North–South research projects

and building research partnerships. Moreover, overlooking North—South research as a category of the federal research budget has negatively affected the scientific standing of this type of research in Switzerland. North—South research continues to suffer from a historical bias on its scientific quality. Including North—South research as a separate item of the federal research budget is an important prerequisite to valorise the merit, certify the status, and promote the quality of this spectrum of the research community in Switzerland. The KFPE has repeatedly called attention to this problem.

The historical record offers no reasons why North–South research has not yet been included in the Swiss national research budget. However, taking this step would capitalise on a number of promising opportunities: the commitment of Switzerland's new federal legislation to international research and innovation cooperation, the prospect to contribute substantially to the Sustainable Development Goals (SDGs) by 2030, and the contribution of global research partnership networks to address global crises such as the current COVID-19 pandemic.



References

Aeschlimann A, Graf JF, Tanner M (2001) Centre Suisse De Recherches Scientifiques En Côte D'Ivoire 1951-2001. Bern: Academie suisse des sciences naturelles.

Freyvogel TA (1998) Research Partnership with Developing Countries. Swiss Academy of Sciences (SAS) SANW-INFO Spezial 1.

Gaillard JF (1994) North-South Research Partnership: Is Collaboration Possible between Unequal Partners? Knowledge and Policy 7 (2), 58.

Gieryn TF (1983) Boundary-work and the demarcation of science from non-science: strains and interests in professional ideologies of scientists. American Sociological Review 48 (6), 781-795.

Graf C, Zinkl WD (1994) Die Förderung

Entwicklungsländerrelevanter Forschung und Entwicklung in der Schweiz. Impulse für eine Neuorientierung. Forschungspolitische Früherkennung FER 145. Bern: Schweizerischer Wissenschaftsrat.

Gustafsson KM, Lidskog R (2018) Boundary Organisations and Environmental Governance: performance, institutional design, and conceptual development. Climate Risk Management 19, 1-11.

Guston D (1999) Stabilizing the boundary between politics and science: the role of the office of technology transfer as a boundary organisation. Social Studies of Science 29, 87-111.

Guston D (2001) Boundary organisations in environmental policy and science: an introduction. Science Technology and Human Values 26(4), 99-408.

Haselbach E, Lampel G, Meyer D, Sprumont P (eds.) (1990) Dritte Welt und Naturwissenschaften. Schweizerischen Akademie der Naturwissenschaften. Freiburg: Universitätsverlag Freiburg Schweiz.

Hofmänner A (2018) New International Science & Technology Policies: Key Issues and Questions in Switzerland. Exploratory Study for the Swiss Science Council (SCC).

Hurni H, Wiesmann U, Anton P, Messerli P (2004) Initiating Research for Mitigating Syndromes of Global Change in Different Contexts. In: Hurni H, Wiesmann U, Schertenleib R (eds.) Research for Mitigating Syndromes of Global Change: A Transdisciplinary Appraisal of Selected Regions of the World to Prepare Development-Oriented Research Partnerships. Perspectives of the NCCR North-South. Bern: Geographica Bernensia, 11-30.

Hurni H, Maselli D (2001) Experience in Strengthening Research Capacity: A Summary of Contributions to the Workshop. In: KFPE (eds.) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia, 23-31.

Hurni H, Christ U, Lys JA, Maselli D, Wiesmann U (2001) The Challenges in Enhancing Research Capacity. In: KFPE (eds.) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia, 50-55.

Hurni H, Lys JA, Maselli D (2001) The Role of Research for Development. In: KFPE (eds.) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia, 15-22.

IUED (1992) Who Does What in Switzerland: Scientific Cooperation with Developing Countries: A Preliminary Survey of Institutions. Université de Genève: Institut Universitaire D'Etudes du Développement.

IRIS Group (2020) Evaluation of Switzerland's Bilateral Cooperation Programmes in Science and Technology. Prepared for the Swiss State Secretariat for Education, Research and Innovation (SERI). Denmark. KFH (2013) Applied Research in Development and Cooperation - A Program of the Swiss Universities of Applied Sciences and Arts (2007-2013). Rectors' Conference of the Swiss Universities of Applied Sciences. www.kfh.ch/dc.

KFPE (1998) Guidelines for Research in Partnership with Developing countries. 11 Principles. Bern: Swiss Commission for Research Partnerships with Developing Countries (KFPE).

KFPE (2001) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia.

KFPE (2004) Zusammen forschen – Zusammen profitieren. 10 Jahre KFPE. Bern: Conseil des Académies Scientifiques Suisses.

KFPE (2009) Cooperating for Success. Benefits of Research Partnerships with Developing Countries. Bern: Swiss Academy of Sciences (a+).

Leith M, Haward C, Ogier E (2016) Success and evolution of a boundary organisation. Science, Technology and Human Values 41 (3), 375-401.

Lepori B, Dunkel A (2011) Evaluation of the Impact of Swiss BilateralResearch Programs. Lugano: Universitá della Svizzera Italiana.

Lys JA (2012) KFPE's New Guide for Transboundary Research Partnerships. The 11 Principles and 7 Questions. Presentation at the SNSF-SDC Workshop, August 29, 2012.

Maselli D, Sottas B (eds.) (1996) Research Partnerships for Common Concerns. Proceedings of the International Conference on Scientific Research partnership for Sustainable Development. North-South and South-South Dimensions in Bern, March 5-7, 1996. Hamburg: Lit Verlag.

Maselli D, Lys JA, Schmid J (2004) Improving Impacts of Research Partnerships. Bern; Geographica Bernensia.

Maselli D (2001) An Evaluation of Module 7 of the SPPE. In: KFPE (eds.) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia, 209-211.

Meier L (2012) Striving for Excellence at the Margins. Science, Decolonisation, and the History of the Swiss Tropical and Public Health Institute (Swiss TPH) in (post-)Colonial Africa, 1943-2000. PhD Thesis, University of Basel.

Messerli B (2001) A Research Partnership for Environment and Development: History and Future of the SPPE – Module 7. In: KFPE (eds.) Enhancing Research Capacity in Developing and Transition Countries. Bern: Geographica Bernensia, 212-220.

OECD (2011) Opportunities, Challenges and Good Practices in International Research Cooperation between Developed and Developing Countries. Global Science Forum, April, 2011.

Parker J, Crona B (2012) On being all things to all people: boundary organisations and the contemporary research university. Social Studies of Science 42 (2), 262-289.

ProClim (1997) Research on Sustainability and Global Change – Visions in Science Policy by Swiss Researchers. http://www.proclim.unibe.ch/visions.html

Rist G (2019) The History of Development. From Western Origins to Global Faith. London: Zed Books.

SDC (1993) SDC Research Promotion Policy. Bern: Swiss Agency for Development and Cooperation (SDC).

SDC (2002) Research Policy of the Swiss Agency for Development and Cooperation (SDC). Bern: Swiss Agency for Development and Cooperation (SDC).

SDC (2010) Evaluation of SDC's Research Related Activities. Commissioned by the Corporate Controlling Section of the SDC. Bern: Swiss Agency for Development and Cooperation (SDC).

SDC (2012) Policy Sector Development and Cooperation. Research Concept 2013–2016. Bern: Swiss Agency for Development and Cooperation (SDC).

SDC (2016) Policy Sector Development and Cooperation. Research Concept 2017–2020. Bern: Swiss Agency for Development and Cooperation (SDC).

SDC and SAS (1993) Swiss Strategy for the Promotion of Research in Developing Countries. Bern: Swiss Agency for Development & Cooperation (SDC) and Swiss Academy of Sciences (SAS).

SER (2010) Switzerland's International Strategy on Education, Research and Innovation. Bern: State Secretariat for Education and Research (SER).

SERI (2019) Swiss Roadmap for Research Infrastructures in View of the 2021–2024 ERI Dispatch (Roadmap for Research Infrastructures 2019). Bern: State Secretariat for Education, Research and Innovation (SERI).

SERI (2013) Report on the Bilateral Measures of the Confederation's International ERI Strategy. Bern: State Secretariat for Education, Research and Innovation (SERI).

SERI (2018) Switzerland's International Strategy on Education, Research and Innovation. Bern: State Secretariat for Education, Research and Innovation (SERI).

Sieber P, Braunschweig T (2005) Choosing the Right Projects. Designing Selection Processes for North-South Research Partnership Programmes. Bern: Swiss Commission for Research Partnerships with Developing Countries (KFPE).

Star SL, Griesemer JR (1989) Institutional ecology, 'translations' and boundary objects: amateurs and professionals in Berkley's Museum of Vertebrate Zoology, 1907-1939. Social Studies of Science 19 (3), 387-420.

Stöckli B, Wiesmann U, Lys JA (2012) A Guide for Transboundary Research Partnerships. 11 Principles, 7 Questions. Bern: Swiss Commission for Research Partnerships with Developing Countries (KFPE), Swiss Academy of Sciences (a+).

Swiss Federal Council (1994) Guidelines North-South. Report on Switzerland's North-South Relations in the 90's. Bern: Swiss Federal Council.

Tanner M, Kitua A, Degrémont A (1994) Developing Health Research Capability in Tanzania: From a Swiss Tropical Institute Field Laboratory to the Ifakara Centre of the Tanzanian National Institute of Medical Research. Acta Tropica 57, 153-173.

UKRI, KFPE (2018) UKRI – KFPE Workshop Report: Working in Effective Partnerships to Address Sustainable Development Goals. September 12-14, 2018 in Dar es Salaam, Tanzania.

United Nations (2019) Global Sustainable Development Report 2019: The Future is Now - Science for Achieving Sustainable Development. New York: United Nations.

WBGU (1997) World in Transition: The Research Challenge. Annual Report 1996. Berlin: Springer Verlag.

Widmer T, Eberli D, Rudin R (2018) Analyse BFI-Botschaften 2008 bis 2020: Schlussbericht. Studie im Auftrag des Schweizerischen Wissenschaftsrats. University of Zürich: Institut für Politikwissenschaft.

Other sources

KFPE Annual reports 1994-2019

Schweizerisches Jahrbuch für Entwicklungspolitik 2002-2008. Geneva: Institut universitaire d'études du développement.

Jahrbuch Schweiz-Dritte Welt. 1981-2002. Geneva: Institut universitaire d'études du développement.

Federal Act on the Promotion of Research and Innovation (RIPA) of 14 December 2012 (Status as of 1 January 2020)

Federal Act on Funding and Coordination of the Swiss Higher Education Sector (Higher Education Act, HEdA) of 30 September 2011 (Status as of 1 January 2020)

Federal Law on International Development Cooperation and Humanitarian Aid of 19 March 1976

Websites

United Nations Conference on Environment and Development (Earth Summit) (3-14 June 1992, Rio de Janeiro, Brazil): https://www.un.org/en/events/pastevents/UNCED_1992.shtml

The United Nations Conference on Sustainable Development: Rio+20: https://sustainabledevelopment.un.org/rio20

United Nations Millennium Development Goals (MDGs): https://www.un.org/millenniumgoals/

United Nations 2030 Agenda for Sustainable Development / Sustainable Development Goals (SDGs): https://sustainabledevelopment.un.org/

R4d programme: http://www.r4d.ch/

 $SUDAC\ Programme: \ https://www.swissuniversities.ch/it/themen/entwicklung-und-zusammenarbeit/p-6-swissuniversities-development-and-cooperation-network-sudac$

KFPE: https://naturwissenschaften.ch/organisations/kfpe

Appendices

Appendix I: List of KFPE presidents and heads of secretariat

Presidents	Prof. Thierry Freyvogel	1994-1999
	Prof. Hans Hurni	1999-2002
	Anne Clottu Vogel	2002-2004
	Dr. Bruno Stöckli and Prof. Marcel Tanner	2005-2012
	Prof. Laurent Goetschel	2012-2018
	Prof. Thomas Breu	2018-

Heads of secretariat Dr. Daniel Maselli 1994–1997

Dr. Jon-Andri Lys 1997–2020 Dr. Fabian Käser 2020–

Appendix II: Abbreviations

a+ Swiss Academies of Arts and Sciences (prior to 2006: CASS)
 CASS Council of the Conference of the Swiss Academies (after 2006: a+)
 CDE Centre for Development and Environment, University of Bern

CLOCS Clusters of Cooperation in the Global South (SUDAC)
COFER Consortia for Education and Research (SUDAC)
COHRED Council on Health Research for Development

COSTED Committee on Science and Technology in Developing CountriesCSRS Centre Suisse de Recherches Scientifiques, Côte d'Ivoire

DAC Development Assistance Committee (OECD)

DANIDA Danish International Development Agency

DEH Direktion für Entwicklungszusammenarbeit und humanitäre Hilfe (after 1996: DEZA)

EAER Federal Department of Economic Affairs

EC European Commission

EDCTP European & Developing Countries Clinical Trials Partnership

ERI Education, Research and Innovation

ESKAS Eidgenössische Stipendienkommission für ausländische Studierende

FCS Federal Commission for Scholarships for Foreign Students

(Eidgenössische Stipendienkommission für ausländische Studierende, ESKAS)

FDFA Federal Department of Foreign Affairs
GCRF UKRI Global Challenges Research Fund

GDN Global Development Network

GIUB Institute of Geography, University of Bern
GWF Gruppe für Wissenschaft und Forschung
HEdA Swiss Higher Education Act (of 2011)

ICSU International Council for Science (merged with the International Social Science Council

(ISSC to form the International Science Council (ISC) in 2018)

IFAD International Fund for Agricultural Development

IFS International Foundation for Science

IHEID Graduate Institute of International and Development Studies, Geneva

IUED Institut universitaire d'études du développement (Graduate Institute of Development Studies),

University of Geneva

IUHEI Institut universitaire de hautes études internationales, Geneva

IWE Institute of Business Ethics, University of St. Gallen

 JPRs
 Joint Research Projects of the Swiss bilateral research programmes

 KFH
 Conference of the Swiss Universities of Applied Sciences and Arts

 KFPE
 Commission for Research Partnerships with Developing Countries

 MDGs
 United Nations Millennium Goals for Sustainable Development

MOOC Massive Open Online Course

NCCR National Centres of Competence in Research

PRDC Working group for the Promotion of Research in Developing Countries

ProClim Forum for Climate and Global Change

r4d Swiss Programme for Research on Global Issues for Development

RAW00 Netherlands Development Assistance Research Council

R&D Research & Development **RFI** Research Fairness Initiative

RIPA Swiss Research and Innovation Promotion Act (of 2012)

Schweizerische Akademie der Naturwissenschaften (prior to 2005: SCNAT)

SAS Swiss Academy of Sciences (after 2005: SCNAT)
SCNAT Swiss Academy of Sciences (prior to 2005: SAS)

SDC Swiss Agency for Development and Cooperation (prior to 1996: DEH)

SECO State Secretariat for Economic Affairs

SER State Secretariat for Education and Research (incorporated into the SERI in 2013)

SERI State Secretariat for Education, Research and Innovation

SNSF Swiss National Science Foundation

SPIRIT Swiss Programme for International Research by Scientific Investigation Teams (SNSF)

SPP Swiss Priority Programme

SPPE Swiss Priority Programme Environment

SSC Swiss Science Council

STI Swiss Tropical Institute (after 2010: Swiss TPH)

SUDAC swissuniversities Development and Cooperation Network
Swiss TPH Swiss Tropical and Public Health Institute (prior to 2010: STI)

SwissCore Swiss information and liaison office for European policies and programmes in

research, innovation and education

swisspeace Swiss Peace Foundation

td-net Network for Transdisciplinary Research, SCNAT

TWAS World Academy of Sciences for the Advancement of Science in Developing Countries

(Academy of Sciences for the Developing World from 2004 to 2013; Third World

Academy of Sciences before 2004)

UKCDS UK Collaborative on Development Sciences

UKRI UK Research and Innovation

UNESCO United Nations Educational, Scientific and Cultural Organization

WGBU German Advisory Council on Global Change
WTI World Trade Institute, University of Bern

Appendix III: KFPE milestones

1984 Federal Research Act 1987 EU FRPs introduced Scientific and technical cooperation framework agreement between the European Communities and the Swiss Confederation 1988 SAS Forum ProClim established 1989 CASS Symposium Third World and the Natural Sciences, Fribourg (13-14 October 1989) 1990 Working Group for the Promotion of Research in Developing Countries (PRDC) GWF First Swiss Scientific Councillor dispatched to Brussels 1991 Swiss Priority Programmes SPP approved by Swiss Parliament Swiss Debt Relief Programme launched Swiss rejection of membership of European Economic Area (EEA) Switzerland joins Bretton Woods institutions 1992 Swiss Priority Programme Environment (SPPE) - Module 7 on Environment and Development approved by Swiss Parliament Swiss directory on Scientific Cooperation with Developing Countries: Who does what in Switzerland (August) United Nations Conference on Environment and Development UNCED (Rio Earth Summit); Agenda 21 1993 Swiss Strategy for the Promotion of Research in Developing Countries (SDC and CASS) (July) First SDC Research Promotion Policy 1994 KFPE established as 3-year pilot project (1994–1997) (3 March) Prof. Thierry A. Freyvogel elected KFPE president Dr. Daniel Maselli appointed head of secretariat North-South Guidelines. Report on Switzerland's North-South Relations in the 1990s KFPE strategic planning seminar 13–15 March 1995 First KFPE pamphlet 1996 KFPE International Conference on Scientific Research Partnership for Sustainable Development - North-South and South-South Dimensions, 5-7 March, Bern KFPE working group on Guidelines convened 1997 Dr. Jon-Andri Lys appointed head of secretariat Second KFPE pilot phase (1998-2000) 1998 KFPE Guidelines for Research Partnership with Developing Countries, 11 Principles published KFPE mentioned in Federal Education, Research and Technology (ERT) Dispatch 2000–2003 1999 Prof. Hans Hurni elected KFPE president Guidelines presented at World Conference on Science in Budapest NCCRs approved by Swiss Parliament KFPE approved as permanent CASS commission, first KFPE statutes NCCR North-South Pre-Proposal submitted to the SNSF 2000 UN Millennium Development Goals (MDGs) International Conference on Enhancing Research Capacity in Developing and Transition Countries: Experiences and Tools for Promoting Research on Sustainable Development (on behalf of the SDC) 2001 Anne Clottu Vogel elected KFPE president KFPE entrusted with Echanges Universitaires and Jeunes Chercheurs Programmes (SDC) NCCR North-South approved by Swiss Parliament, started 1 July 2001 NCCR North-South Syndrome Pre-Synthesis Project (SPSP) carried out

KFPE Project Improving Impacts of Research Partnerships started

Prof. Marcel Tanner and Bruno Stöckli elected KFPE presidents

Begin of legislative reform process (Swiss research and higher education)

2002

2003

2004

New SDC Research Policy

KFPE 10th anniversary events

SAS changed into SCNAT

Full association of Switzerland with EU FPRs

KFPE Project Selection Processes for North-South Research Partnership Programmes started

Conference on New Swiss Initiatives for the Promotion of North-South Research Partnerships

Conference on Public-Private-Partnerships in North-South Research: Powerful Tool or Trojan Horse?

2005 Federal Council decision to expand Swiss cooperation with developing and transition countries

KFPE publications on Impact Study and Selection Criteria Study

2006 KFPE repositioned as working group of SCNAT, forms part of SCNAT's Platform Science and Policy

Council of the Conference of the Swiss Academies (CASS) transformed into Swiss Academies of Arts and Sciences (a+)

2007 KFPE Conference on Research Partnerships in a Globalized World

2009 KFPE Publication: Cooperating for Success. Benefits of Research Partnerships with Developing Countries

International Foundation for Science (IFS); Support for Scientific Capacity Building in Developing Countries: Coordinating and Enhancing Efforts

2010 International ERI Strategy (SERI)

Evaluation of SDC's Research Related Activities

2011 Echanges Universitaires and Jeunes Chercheurs Programmes (SDC) discontinued

Higher Education Act (HEdA) passed

2012 Prof. Laurent Goetschel elected KFPE president

KFPE Guide for Transboundary Research Partnership, 11 Principles, 7 Questions

Research and Innovation Promotion Act (RIPA)

Swiss Programme for Research on Global Issues for Development (r4d) Programme launched by SDC and SNSF

SDC Policy Sector Development and Cooperation Research Concept 2013–2016

Factsheet Rio+20, SCNAT Water security for a planet under pressure – and the consequences for Switzerland

2013 KFPE statutes revised

First Research Fair with SDC

KFPE collaborates with Integrated Graduate School North South to establish database

Swiss Academies Factsheet Environmental changes and migration in developing countries

Learning Events for Researchers from Developing Countries (on behalf of SDC)

SER transferred from FDHA to EAER to form new SERI

2014 KFPE 20th anniversary events

KFH Development and Cooperation Strategy

First Science-Policy Workshop in Laos

swissuniversities call for proposals project-specific contributions (HFKG Art. 59)

2015 Swiss Academies Factsheet Health and global change in an interconnected world – Concerns and responsibilities for Switzerland

Transnational Research Partnership Workshop (r4d programme-COHRED)

Second Science-Policy Workshop in Laos

SUDAC proposal submitted to swissuniversities

2016 SUDAC programme launched

Second Research Fair with SDC

Swiss Academies Factsheet Making the Commodity Sector Work for Developing Countries - Local Impacts, Global Links, and Knowledge Gaps

Swiss Academies Factsheet Switzerland and the Commodities Trade -Taking Stock and Looking Ahead

2017 KFPE organizes SDC Learning Event for Researchers from Developing Countries

KFPE/SUDAC conference on Going digital in research and education partnerships: opportunities, challenges and risks

2018 Prof. Thomas Breu elected KFPE president

KFPE 25th anniversary conference on Leveraging Research Partnerships for Global Challenges, 22 November, Bern

UKRI-KFPE Workshop in Tanzania Working in Effective Partnerships to Address Sustainable Development Goals, 18 September,

Dar es Salaam, Tanzania

2019

KFPE-COHRED Conference, Toward a Global Reporting Standard for Fair Research Partnership, 12 April, Geneva

KFPE video clip: Out of Laboratories: Research Partnerships in a Changing World SUDAC International Conference Think Global, Act Local: Relevance and Prospects

of SDGs for Swiss Universities and Their Global South Partners, 18 October, Bern

GAIA joint publication on Research for Sustainable Development Goals

KFPE project website on research for the SDGs

UKRI-KFPE Workshop report on Working in Effective Partnerships to Address Sustainable Development Goals

Statement on Switzerland's International Cooperation Strategy 2021–24

2020 KFPE/SCNAT Guidelines to Conflict Sensitive Research

Swiss Academies Factsheet Small state, big companies. Rules for economic globalization and the role of Switzerland

Swiss Academies Factsheet Variety is the source of life. Agrobiodiversity benefits, challenges, and needs

Dr. Fabian Käser appointed head of secretariat

Appendix IV: Topics of KFPE conferences 1996–2019

1996	International Conference on Scientific Research Partnership for Sustainable Development – North-South and South-South Dimensions, 5–7 March, Bern
1999	Forschungspartnerschaften für ein verbessertes Ressourcenmanagement in der Dritten Welt, KFPE Symposium
2000	Enhancing Research Capacities in Developing and Transition Countries
2001	Scientific Partnership for Sustainable Development: Experiences in Latin America,
	Workshop in Cartagena, Colombia
2002	Neue Schweizerische Initiativen zur Förderung von Nord-Süd Forschungspartnerschaften
2003	Public-Private-Partnerships in North-South Research: Powerful Tool or Trojan Horse?
	(KFPE annual conference), with Syngenta Foundation for Sustainable Agriculture and Task Force Sight and Life, Basel, 19 September
2004	Zusammen Forschen – Zusammen profitieren, KFPE 10-year anniversary event
2005	Wie global denkt die Schweizerische Forschung?
2006	Forschung mit Entwicklungs- und Transitionsländern: Welche Politik braucht die Schweiz?
	Neues Konzept der bilateralen FZA des Bundes zur Debatte (KFPE annual conference)
2007	Forschungspartnerschaften in einer globalisierten Welt (KFPE annual conference)
	bilaterale Forschungspolitik im Zentrum (Implementierung), Leading Houses
2009	From Research to Development – Mutual Learning for Change?" with University of Lugano
2010	Making Research Relevant to Urban Development, with University of Basel
2011	Research Partnerships for Development: Role and Challenges in a Globalizing World
2012	How Research Partnerships with Developing Countries Contribute to Swiss Research and the
	Swiss Economy, 22 October, Bern
2013	Results and Innovations from Transnational Research Partnerships, first SDC and KFPE Research Fair
2014	Science-Policy Exchange 13–14 February, Vientiane, Laos
2015	Workshop on Commodities and Trade, 21 April
	Doing Research in Conflict Areas: Being Sensitive to Conflict and Managing Risks Workshop on Science-Policy Engagement, 8–9 September, Vientiane, Laos
2016	Transparency in commodities trading: Options for action at the international level and in Switzerland,
2010	20 September
	Research and innovation as drivers in achieving the Sustainable Development Goals, SDC and KFPE
	Second Research Fair, 9 November, Bern
2017	Going digital in research and education partnerships: opportunities, challenges and risks (with SUDAC)
2018	Leveraging Research Partnerships for Global Challenges, anniversary event
	Toward a Global Reporting Standard for Fair Research Partnership, KFPE–COHRED Conference,
	12 April, Geneva
2019	Think Global, Act Local: Relevance and Prospects of SDGs for Swiss Universities and

Their Global South Partners, SUDAC International Conference (with swissuniversities)

Alexandra Hofmänner received her habilitation in the field of Science & Technology Studies at the University of Basel, Switzerland. She holds a PhD from the Swiss Federal Institute of Technology (ETH Zurich) and has carried out research in Switzerland and South Africa.

Who are we?

The Swiss Academies of Arts and Sciences are an association of the Swiss Academy of Natural Sciences (SCNAT), the Swiss Academy of Humanities and Social Sciences (SAHS), the Swiss Academy of Medical Sciences (SAMS), the Swiss Academy of Engineering Sciences (SATW) and the Swiss Young Academy (SYA). They further comprise the two centres of excellence TA-SWISS (Foundation for Technology Assessment) and Science et Cité, as well as other scientific networks. The Swiss Academies of Arts and Sciences network the sciences regionally, nationally and internationally. They represent scientific communities on a disciplinary and interdisciplinary basis and independently of institutions and subjects. Their network is geared to the long term and committed to scientific excellence. They advise politics and society on knowledge-based and socially-relevant issues.

SCNAT - network of knowledge for the benefit of society

The Swiss Academy of Sciences (SCNAT) and its network of 35,000 experts works at regional, national and international level for the future of science and society. It strengthens the awareness for the sciences as a central pillar of cultural and economic development. The breadth of its support makes it a representative partner for politics. The SCNAT links the sciences, provides expertise, promotes the dialogue between science and society, identifies and evaluates scientific developments and lays the foundation for the next generation of natural scientists. It is part of the association of the Swiss Academies of Arts and Sciences.

