

THE GRADUATE INSTITUTE | GENEVA
GLOBAL HEALTH PROGRAMME

Case Studies

THE ROLE OF SWITZERLAND IN GLOBAL HEALTH GOVERNANCE PART I: A DEVELOPMENT PERSPECTIVE



COPYRIGHT © GLOBAL HEALTH PROGRAMME | 2010

Compiled by Jacques Martin in 2009

Published by:
GLOBAL HEALTH PROGRAMME
THE GRADUATE INSTITUTE | GENEVA
Po Box 136 | 1211 Geneva 21 | Switzerland
E globalhealth@graduateinstitute.ch

Reproduction of the information contained in this book is authorized provided the source is acknowledged.

General coordination: Michaela Told
English language editing: Nick Kouppari

A downloadable version of this publication is available at www.graduateinstitute.ch/globalhealth
T +41 22 908 5700
E globalhealth@graduateinstitute.ch

CONTENT

The Role of Switzerland in Global Health Governance The development cooperation contribution Professor Dr Ilona Kickbusch	5
Pharmaceutical policies as part of health policy at local and global levels Pascale Brudon, Immita Cornaz	11
The Global Forum for Health Research: a bilateral contribution by Switzerland to launch and develop a public–private multilateral partnership (1998–2008) Louis Currat	21
Supporting national research for health: the work of the Council on Health Research for Development (COHRED), 1993–2009 and beyond Martine Berger, Daniel Mäusezahl	33
Applying a sector-wide approach to the health sector: Switzerland’s experience in Mozambique in the 1990s Ambassador Thomas Greminger	45
Large-scale malaria control saves many lives in Tanzania Professor Dr Christian Lengeler.	57
International Centre for Diarrhoeal Research, Bangladesh: acting locally, disseminating globally Jacques Martin	67
About the authors.	79

FOREWORD

THE ROLE OF SWITZERLAND IN GLOBAL HEALTH GOVERNANCE THE DEVELOPMENT COOPERATION CONTRIBUTION

Professor Dr Ilona Kickbusch

Director, Global Health Diplomacy Programme

Long before the terms ‘global health’ and ‘global health diplomacy’ were coined, actors at international and local level had already conceived, supported and/or implemented related activities. These activities were, in essence, neither purely national nor totally international, but somewhere in between and likely to benefit many beyond their own sphere.

During the last 30 years of the 20th century and in the early years of the present one, even small countries like Switzerland frequently managed to feature among the most serious actors of change, providing timely expertise and necessary financing – often seed financing – in the conducive context of partnership. Several such endeavours, often involving just a few partners, have been recognized as success stories. They have directly or indirectly contributed to the emergence of new international health trends and/or have paved the way for global health approaches.

This publication presents a series of case studies designed to keep a record of these past activities. They have foreshadowed many of today’s key activities, in particular, partnerships that have benefited the health of tens of millions of people. They have also helped to lay the foundations for contemporary initiatives at the heart of global health.

PHARMACEUTICAL POLICIES

In their very informative and constructively critical presentation on 'Pharmaceutical policies as part of health policy at local and global levels', Pascale Brudon and Immita Cornaz shed light on progress, over the last 30 years, in the field of essential drugs and on the difficulties faced by such a concept in the early stages of its development. By doing so, they help us measure progress. The authors, who were actors in their respective capacities in the 1985 Nairobi Conference of Experts on the Rational Use of Drugs, also explain that the WHO leadership at the time – headed by Dr Halfdan Mahler, who had also spearheaded the Alma-Ata Conference – was conducive to breakthrough in this domain. The article reminds us of the crucial importance of the availability of and access to essential drugs, as a key means of achieving the 'health for all' targets. The authors also demonstrate that solid knowledge-based competence, the ability to convince peers, as well as personal commitment to a cause, enable a small group of experts to significantly steer policies; the role of Professor Georges Peters, among others, is recalled here.

HEALTH RESEARCH

The fact that health research was not responding to the needs of developing countries was studied in greater depth by the Commission on Health Research for Development in 1987–1990. Among other outcomes, this work spawned two sister organizations: one dealing with the concept of essential national health research – COHRED (Council on Health Research for Development); and the other with broadening the necessary dialogue in the field of health research to include the private sector, academia, NGOs and governments – GFHR (Global Forum for Health Research). The creation of the two organizations was necessary as, at the time, WHO was devoting insufficient attention and resources to these crucial issues – or perhaps it was prevented from doing so by those who preferred the status quo. In the aftermath of the 1985 Nairobi Conference, further exchanges took place and these helped describe, in particular, what has since been called the '10/90 gap'. Articles by **Louis Currat** on the Global Forum and by **Martine Berger** and **Daniel Mäusezahl** on COHRED present these two organizations and explain why they were created, how they operate and what outcomes and impacts they have helped to produce.

SWAP FOR HEALTH

In his presentation of early Swiss involvement in a health sector-wide approach (SWAP) programme in Mozambique, **Ambassador Thomas Greminger** demonstrates the value of local ownership-based development aid mechanisms. These mechanisms are, in some way, an early configuration of the principles adopted in Paris in 2005 on alignment, coordination and harmonization. This self-critical article explains how difficult and time-consuming a dialogue amongst partners can be in support of such an approach. The proposed sector-wide approach was a challenge, not only for the donors, but also for the recipient partners. It helped a country that had just entered a post-war phase, which was facing many challenges in adopting centrally inspired and monitored regional approaches – these were very much needed given the earlier divisions caused by civil war. Whilst a SWAP has helped avoid duplication and has, to some extent, increased programme coherence and impact, it may not offer full economies of scale.

MALARIA: IMPREGNATED BEDNET DISTRIBUTION AND SCALING UP

Thanks to its decades-long presence in Tanzania and its good track record in health research and public health, in partnership with local institutions and authorities, the Swiss Tropical Institute (STI) was the partner of choice to help develop a national impregnated bednet programme to fight malaria and save, in particular, children's lives. **Christian Lengeler** depicts a concrete programme that was initiated in the mid-1990s, aimed at serving a sizeable population in two districts in south-central Tanzania. This first large-scale insecticide-treated net programme in Kilombero was scientifically monitored by STI and its partners. The positive outcome of this large-scale experiment helped launch much larger investments at a later stage, specifically those by The Global Fund to Fight AIDS, Tuberculosis and Malaria. The success of these partnerships has helped save tens of thousands of children's lives a year. The author and the Swiss Agency for Development and Cooperation (SDC) probably regret that the social marketing approach – which relies on an intense behaviour change communication programme and on a dense network of commercial retailers – may have been lost in the national scaling-up phase due to the fact that

operations funded by the Global Fund have opted to give out nets. Lengeler and SDC acknowledge, however, that this early Swiss initiative was a successful pre-investment for the scaling-up decisions made in Tanzania and for similar decisions made – or to be made – in many other developing countries.

ICDDR,B: FROM SINGLE-DISEASE-BASED RESEARCH TO COMPREHENSIVE HEALTH RESEARCH

In his presentation, **Jacques Martin** illustrates the growth and evolution of ICDDR,B, a cholera research centre in Dhaka, Bangladesh, which attracted a broad base of supporters and evolved from a single-disease concern to address wider public health objectives. Famous for the scientific demonstration of the oral rehydration solution (ORS), the centre has developed far beyond its original focus on cholera, whilst managing to avoid spreading itself too thinly. The common theme, however, remains diseases of poverty. The author also stresses that a relatively small donor joining a common effort, where other larger donors are involved, can help make a difference. Large donors – in this case the USA – may find it useful to be part of a broader partnership. With a long-term investment, even a small but loyal donor can be considered a major supporter of such a development endeavour, as demonstrated by the 40 million Swiss francs invested in ICDDR,B. The quality of the science and experience gathered, and legitimated locally and regionally, as well as the global large-scale dissemination of results and related strategies, indicate that these two levels (local and global) are intimately linked in a research-based health development strategy. Jointly, they contribute solidly to address global health challenges.

PHARMACEUTICAL POLICIES AS PART OF HEALTH POLICY AT LOCAL AND GLOBAL LEVELS

Pascale Brudon, Immita Cornaz

INTRODUCTION

Lack of access to and an irrational use of pharmaceuticals have been a concern since the emergence of modern drugs in the second half of the 20th century. In the 1970s, the World Health Organization (WHO) launched the essential drugs concept (EDC) along with an international programme aimed at improving the situation in developing countries, where problems relating to pharmaceuticals were particularly acute. This initiative – effectively a peaceful revolution in international public health but also a source of intense controversy – represents a significant contribution to global health. This paper deals with the developments of those years, the lessons for global health and Switzerland's contribution.

1. THE ESSENTIAL DRUGS CONCEPT AND PHARMACEUTICAL POLICIES

In 1975, WHO's director-general at the time, Dr Halfdan Mahler, in his report to the World Health Assembly (WHA)¹ identified national pharmaceutical policies as a means of meeting health needs and economic priorities in developing countries. He also referred to experiences with carefully selected drug lists in Chile, Cuba, Mozambique, Papua New Guinea and Sri Lanka, which have led to improved access to drugs. This remarkable report was “a clear step toward creating a new campaign on pharmaceuticals, focusing on the concept of essential drugs, with the goal of influenc-

¹ Mahler, H. Report to the 28th World Health Assembly, Official Records of the World Health Organization, No. 226, Annex 13, pp. 96–110. Geneva: World Health Organization, 1975.

ing domestic policies in poor countries”². Essential drugs were then recognized as a solution to the multiple problems faced by poor countries in the area of medicines. In order to make the concept more operational, WHO developed and published, in 1977, the 1st Model List of Essential Drugs, which comprised 220 drugs. Essential drugs were defined as “those that satisfy the health care needs of the majority of the population; they should be available at all times in adequate amounts and appropriate dosage forms”³. Although the list has been revised and updated several times, the definition has remained unchanged.

This new approach adopted by WHO responded to a worldwide need. Health administrators throughout the developing world asked the organization to help them by improving a situation characterized by limited access to drugs, high prices, difficulty in selecting adequate products from the wide range produced by the pharmaceutical industry, large amounts of resources spent on ineffective drugs, and irrational prescribing etc. They were desperately looking for new solutions. At the same time, it was observed that appropriate drugs were a key element of health systems in developing countries and that the use of limited drug formularies by some countries, such as Mozambique, yielded positive results. In developed countries, larger hospitals used restricted drugs lists, while studies have also shown that most doctors use only a limited range of drugs. The originality of WHO’s approach was to extend the concept of limited lists to national systems and to promote this as a tool for social justice. In the late 1970s, WHO integrated the concept of essential drugs into its strategy ‘Health for All by the Year 2000’. It was also an important component of the Declaration of Alma-Ata in 1978. At the same time, the pharmaceutical industry campaigned strongly to show that the concept was detrimental to the quality of healthcare.

It soon became evident that the list alone was not enough and that policy changes were also required. WHO subsequently developed the broader concept of drugs policies based on essential drugs (ED). In 1981, the World Health Assembly established the WHO Action Programme on Essential Drugs and Vaccines (DAP), whose main objective was the development of national drug policies. The support provided by the programme

covered all aspects of national drug policies, from selection, procurement, quality assurance, legislation and regulatory control, to the use of drugs. Issues were discussed in policy and technical terms at global and local level, while essential drugs programmes and policies were initiated in many countries as main components of national health policies, with the support of WHO, industrialized countries and their development agencies, and the international public health community.

The move by WHO – under the leadership of the executive board and the WHA – from a traditional normative approach to policy and operational support was favoured by the forthcoming New International Economic Order and the emergence of strong consumer movements such as Health Action International (HAI). Most WHO member states welcomed these new approaches to medicines. Developing countries, faced with significant debt, ineffective health systems and drug access problems, saw the essential drug concept as a way of rationalizing their drug sector. Some industrialized nations, among them the Nordic countries and Switzerland, were looking for a more rational use of resources in developing countries. The essential drugs concept seemed to answer many of their concerns. Their conceptual and financial contributions were often met with heavy criticism. Indeed, some medical associations argued that the concept of essential drugs was a threat to the freedom of prescribing, while the pharmaceutical industry – particularly the research-based industry, supported by some Western countries – argued that it would endanger the industry as well as jeopardize its future research efforts.

Despite strong resistance from the pharmaceutical industry, but with the explicit support of the Swiss delegation to the World Health Assembly, WHO convened, in 1985, the Conference of Experts on the Rational Use of Drugs – the so-called Nairobi Conference – so that confrontation could give way to dialogue. It brought together specialists from different disciplines and perspectives, including industry, consumer groups, donors, academics and national policy-makers. The conference agreed on important issues relating mainly to drug information, drug regulatory programmes and prescribing practices. However, it failed to reach an agreement on other strongly-debated issues such as a WHO marketing code for medicines or the extension of essential drug lists to the private sector.

2 Reich, M.R. ‘Essential drugs: economics and politics in international health’ in *Health Policy*, 8: 39–57, 1987.

3 World Health Organization. *The use of Essential Drugs*. WHO Technical Report Series No. 685. Geneva: World Health Organization, 1983.

Following years of intense debate and the departure of the WHO director-general, Dr Mahler, essential drugs slipped down the global agenda. However, the Action Programme on Essential Drugs and Vaccines continued to promote essential drugs and pharmaceutical policies as a key international health issue, and to support the implementation of national policies at local level with the financial and technical support of industrialized countries.

Today, however, in many countries poor people are still denied access to the most essential drugs, while the irrational use of drugs, including antibiotics, is widespread. In the 1990s, this lack of progress and the spread of the HIV/AIDS pandemic raised new questions on the way pharmaceuticals are researched, produced and distributed, and how access to drugs for HIV patients and for those suffering from other diseases, such as tuberculosis and malaria, can be guaranteed. Health administrators and researchers acknowledge that the existing system, based on a model for drug development driven by commercial interests and protected by patents, leaves many pressing health needs unanswered, increases the price of pharmaceuticals and fails to stimulate the necessary research and development for medicines for rare diseases and diseases that predominantly affect developing countries.

The high prevalence of HIV/AIDS in the North and the South, along with pressure by patients and consumer groups, has resulted in renewed efforts to improve access to certain life-saving drugs. New sources of drugs – for example, Brazil, China and India – and new programmes – such as The Global Fund to Fight AIDS, Tuberculosis and Malaria, supported by donors and foundations – were important incentives in increasing access and reducing the price of these drugs, but also in developing new approaches to drugs discovery and procurement, such as compulsory licensing, advanced market commitment and prize funds. These efforts were reinforced by the work carried out by the WHO Intergovernmental Working Group on Public Health, Innovation and Intellectual Property (IGWG), chaired by the former president of the Swiss Confederation, Ms Ruth Dreifuss, and convened to discuss improved medicines research and development for the poor countries of the world. The group agreed, in 2007, on basic principles for a global strategy and plan of action, which will be implemented in the coming years.

2. WHAT ARE THE LESSONS FOR GLOBAL HEALTH?

The essential drugs concept has become an integral part of the agenda for health at a global level and, to a large extent, in national health systems. Several facts led to this development.

- 1. It was a scientifically sound concept supported by highly respected pharmacologists and public health specialists from developed and developing countries, it was easily understandable, it was a useful and practical tool for priority-setting in healthcare, it was perceived as ethical, it was simple and, at the same time, it offered a solution to many issues.
- 2. There were already some experiences in developed and developing countries and they were convincing. The concept was not without foundation.
- 3. A number of industrialized countries were very supportive of the concept and of DAP. Most of these were involved in supporting social justice and health policies in developing countries and, with the exception of Switzerland, hosted no research-based drugs industry. Switzerland strongly supported DAP and WHO's essential drugs policy, despite the fact that its pharmaceutical industry is one of the most powerful in the world.
- 4. A very active international movement concerned with drug issues and health – and involving consumers and patient groups from developed and developing countries – carefully followed all the debates and provided intellectual ammunition to WHO and others.
- 5. Effective advocacy for the concept, as well as actual help for countries to adopt the concept and to implement drug policies based on the EDC, enabled the essential drugs concept to become an integral part of the healthcare systems of developing countries.

The birth and development of the EDC were, therefore, the result of the action and interaction of actors at all levels. The causes of the problems were analysed in the field and daring new experiments developed, deliberately opting for primary healthcare and health for all; exchange also took place, which led to cross-fertilization; support was given, but there was also (often merciless) confrontation. The actors involved were physicians and health administrators who dared to name the conflicts they faced and to look for new ways of improving healthcare at a local or country level, particularly in developing countries; committed activists of consumer and patient organizations; highly qualified scientists; representatives of national and international pharmaceutical industry associations; delegates to the WHO executive board and to the World Health Assembly; and, last but not least, the World Health Organization and its staff under the leadership of Director-General Halfdan Mahler.

And yet, this powerful concept has not been exploited to its full potential. One reason may be the fact that the full implementation of the concept would have a strong impact on the pharmaceutical market worldwide, and on the research-based drug industries. The objectives of the EDC (social justice, equity and health) and those of the industry (growth and profits) do not sit easily together. Any policy with an impact on the distribution of drugs has to face this very real conflict. In other words, conceptual developments at a global level may help to shape national policies; at country level, however, carefully considered strategies are required to overcome the problems created by conflicting interests.

3. CONTRIBUTIONS BY SWITZERLAND

In the 1970s, when the essential drugs concept was developed, Switzerland was in a unique position with, on the one hand, a well-established, powerful and promising research-based pharmaceutical industry and, on the other, the internationally known pharmacologist Professor Georges Peters, director of the Institute of Pharmacology of the University of Lausanne, with good field experience in healthcare and health protection, and fully committed to the principles of the rational use of drugs. This situation, potentially loaded with conflict, paradoxically helped to strengthen the

essential drugs concept, both nationally and internationally. The third element in the equation, the Swiss government, also played a role through the Federal Office of Public Health of the Ministry of the Interior, the Federal Department of Economy and its Office of Economic External Affairs (formerly BAWI, now SECO – State Secretariat for Economic Affairs), and the Ministry of Foreign Affairs via the Swiss Agency for Development and Cooperation (SDC).

Georges Peters played an active part as expert in the WHO committee for essential drugs and in the drafting of the 1st Model List of Essential Drugs and its subsequent revisions. His experience and knowledge of the subject greatly enhanced his contribution, and enabled him to respond to objections raised by the pharmaceutical industry to the concept of essential drugs. Professor Peters strongly influenced many of his medical students, among them future physicians from the developing world. As a result, he was invited by the Algerian health ministry and by the Mozambican health minister – former student Pascual Mocumbi – to advise the two countries on the establishment of a national drug policy. For Mozambique, Georges Peters also devised a national drug control laboratory project aimed, on the one hand, at ensuring the quality of the drugs used – and therefore better healthcare – and, on the other, to avoid wasting financial resources – a revolutionary project for a poor, developing country and not easy to realize but, precisely given of the country's poverty, a most useful investment. SDC agreed to financially contribute to the project, which was implemented with the scientific and technical advice of Professor Peters. To our knowledge, SDC was the first development agency in the world to finance such a project. SDC took this decision after consulting the other ministries concerned, as well as the association of Swiss pharmaceutical research companies, Interpharma. Although the project was greeted with suspicion, the arguments in favour of it won the day.

The International Conference on Primary Health Care in Alma-Ata in 1978, where the essential drugs concept was an important subject, markedly influenced the two participants from the Swiss government: the director of the Federal Office of Public Health and the SDC officer, in charge of the social development unit and health. Following the conference, SDC invited Professor Peters to join its reorganized Advisory Group for Health, where he played an important role over the years. Among other things, he

advised SDC on the definition of a comprehensive policy paper concerning drugs in development aid ⁴ as well as on other health-related aspects.

The policy paper also referred to the principles of the EDC – including the use of generic drugs which, at the time, encountered resistance from the Swiss pharmaceutical industry – and to the rational use of drugs. Finalizing the paper was a lengthy process and involved close consultation with the Federal Office of Public Health and the Federal Office of Economic External Affairs; meetings were also held with representatives of the pharmaceutical industry and other experts. The policy paper guided SDC in dealing with several projects relating to health, while justifying its financial support to the WHO Action Programme on Essential Drugs and Vaccines (DAP). The paper recently adopted by SDC and the Federal Office of Public Health is less explicit.

Prior to the adoption of the policy paper, Professor Peters had also advised the Swiss delegation to the World Health Assembly – in particular, the SDC delegate – on drug-related matters. This enabled the delegation to take an unequivocal stand at the 1985 Conference of Experts on the Rational Use of Drugs, and to deal with criticism from the Swiss pharmaceutical sector. The two Swiss government experts invited to the conference, Professor Beat Roos, director of the Federal Office of Public Health, and the SDC member in charge of health, prepared a working paper for the conference ⁵. The working paper was well received – and sparked some surprise given that its authors were Swiss.

4. CONCLUSION

Despite the fact that the situation of Switzerland with regard to pharmaceutical products was indeed peculiar in the 1970s and 1980s, it also illustrates the crucial role of commitment and interaction – and this is true not just for Switzerland. Had it not been for qualified people at all levels, strongly committed to social justice, equity and health, and had it not been for interaction among people and institutions, at national and international level, the essential drugs concept would never have come about and the value of the rational use of drugs would never have been fully recognized.

That said, we are still faced with a crucial question: what is required today to restore, to the top of the agenda, the essential drugs concept, and the rational use of drugs as well as health for all, in particular, the poorest and the most vulnerable?

⁴ Les médicaments dans la politique suisse de coopération au développement, Bern, December 1985.

⁵ Rational use of drugs: aims, problems and principles to be observed, Bern, November 1985.

THE GLOBAL FORUM FOR HEALTH RESEARCH: A BILATERAL CONTRIBUTION BY SWITZERLAND TO LAUNCH AND DEVELOP A PUBLIC–PRIVATE MULTILATERAL PARTNERSHIP (1998–2008)

Louis Currat

INTRODUCTION AND OVERVIEW

By definition, world problems are problems that affect not only the people or communities directly concerned, but whose negative effects go beyond national boundaries and are felt directly or indirectly by a majority of the world's population over more than a generation, for example, ill health, climate warming, loss of biodiversity, sea pollution, water depletion, hard drugs, illiteracy and so on. These problems are sometimes referred to as 'global public bads'.⁶ Because of the scale of these problems, solutions are far beyond the capacity of any single institution – even the UN organizations – irrespective of their size. In order to be successful, solutions will require a large number of public and private institutions, as well as civil society organizations, to join forces at international, regional and national level.

This case study focuses on the joint response of the world community, and of Switzerland in particular, to one of these world problems (namely ill health – the focal point of three out of eight Millennium Development Goals) and to one cause of ill health in the world, namely the huge imbalance in the overall health research agenda. This agenda concentrates most of its resources on diseases in industrialized countries, whilst research on diseases in less advanced and poor countries remains limited and out of proportion with their disease burden.

⁶ Global Forum for Health Research. The 10/90 Report on Health Research 2001–2002, p. 10. Geneva: Global Forum.

This study attempts to illustrate:

- the creation, development and initial results of the Global Forum for Health Research (GFHR), which was launched in 1998 as a public–private multilateral partnership to help correct health research disequilibrium in the world
- the bilateral contribution of Switzerland to this endeavour

The main points discussed are the following:

- 1. Origins of the endeavour: the 10/90 gap in health research
- 2. What are the objectives of the Global Forum for Health Research?
- 3. Partners, strategies and results of the Global Forum for Health Research
- 4. Has the investment made by Switzerland in the Global Forum for Health Research been effective?
- 5. Policy implications: the benefit of a bilateral contribution to a multilateral public–private partnership (PPP)

1. ORIGINS OF THE ENDEAVOUR: THE 10/90 GAP IN HEALTH RESEARCH

In 1987, some 12 international public health specialists and economists got together to discuss the possibilities of improving the health of people in developing countries through research, in the belief that research had been largely neglected in these countries and that it could make a significant contribution to development. They became known as the Commission on Health Research for Development⁷, an international initiative completely independent from any institution or agency. Eight members were from developing countries and four from developed countries. Over a two-year period, they reviewed available information, commissioned special papers and consulted widely around the world. During eight Commission meetings, they heard hundreds of health researchers, ministers, UN experts, social activists and health managers.

They found “a gross mismatch between the burden of illness, which is overwhelmingly in the Third World, and investment in health research, which is overwhelmingly focused on the health problems of industrialized countries”. This problem was later referred to as the ‘10/90 gap’ in

health research, symbolizing the huge discrepancy between the burden of disease and health research funding. To illustrate, diarrhoeal diseases are estimated to represent about 5 per cent of the total burden of disease⁸ in the world but to receive only 0.06 per cent of total investment in health research in the world (public and private); malaria (2.8 per cent of the burden of disease and 0.1 per cent of research investment); road traffic injuries (3.1 per cent of the burden of disease and 0.05 per cent of research investment); tuberculosis (2.3 per cent of the burden of disease and 0.05 per cent of research investment). The main consequence of the 10/90 gap in health research is that the vast majority of the world’s population, particularly the poor, benefits little from health research.

The 1996 report of the WHO Ad Hoc Committee on Health Research⁹ pursued the pioneering work of the 1990 Commission on Health Research for Development, underlining again the central role that health research had played in driving the enormous improvements in human health in the past century – also based on the World Bank’s *World Development Report 1993: investing in health* – and the need to address priorities in health research.

Switzerland and the Swiss Agency for Development and Cooperation (SDC) were closely associated with these efforts. The final meeting of the Ad Hoc Committee on Health Research was convened by SDC and hosted by the World Health Organization in Geneva in June 1996. It brought together about 120 researchers, government officials, UN agency representatives, non-governmental organizations (NGOs) and investors in health research. It strongly endorsed the report’s recommendation for the creation of a global forum for health research with the mandate to continue the work of the 1990 Commission on Health Research for Development and the 1996 Ad Hoc Committee. SDC chaired the international preparatory committee which led to the creation of the Global Forum for Health Research in June 1997 and seconded one of its staff members to be the first executive secretary of the Global Forum. Several countries (Canada, Norway, Sweden and Switzerland) along with the Rockefeller Foundation, WHO and the World Bank, provided financial support for the secretariat, which started its operations in January 1998.

⁸ As measured by DALYs (disability-adjusted life years), or the number of healthy life years lost to morbidity or premature mortality measured for each disease.

⁹ World Health Organization. *Investing in Health Research and Development*. Report of the Ad Hoc Committee on Health Research Relating to Future Intervention Options. Geneva: World Health Organization, 1996.

⁷ Commission on Health Research for Development. *Health Research: Essential Link to Equity in Development*. Oxford University Press, 1990.

2. WHAT ARE THE OBJECTIVES OF THE GLOBAL FORUM FOR HEALTH RESEARCH?

The primary objective of the Global Forum is to help correct the disequilibrium in health research, which is symbolized by the expression ‘10/90 gap’. In pursuit of this goal, the Global Forum pays particular attention to the following specific objectives, namely, to:

- contribute to efforts to measure the resource flows in health research
- support the development of priority-setting methodologies
- identify and debate critical, controversial and burning issues affecting the 10/90 gap in health research
- give special consideration to the health problems of the poor
- ensure that gender analysis is consistently and systematically applied to all work on the 10/90 gap
- provide a platform for debate and synthesis review of efforts in the field of research capacity strengthening
- support concerted efforts and the development of networks and partnerships – between the public sector, private commercial sector and civil society organizations – in the priority sectors of health research, when appropriate, and when the benefits of joint action are greater than the sum of benefits of individual actions

3. PARTNERS, STRATEGIES AND RESULTS OF THE GLOBAL FORUM FOR HEALTH RESEARCH

WHO ARE THE PARTNERS IN THE GLOBAL FORUM?

Efforts to correct the 10/90 gap require the commitment of thousands of institutions and individuals in the North and South, including the following:

- government decision-makers
- research institutions and universities
- multilateral agencies
- bilateral development organizations
- private foundations
- private sector companies
- women’s organizations
- national and international civil society organizations (CSOs)
- and the media

All of them have an impact on the 10/90 gap and are therefore considered to be partners in the Global Forum. The aim was to create a movement to correct the 10/90 gap in which partners, concerned by the very serious consequences of such a misallocation of resources, contribute in very different ways to the overall objective.

The Global Forum is governed by a Foundation Council, composed of 20 members representing the partners mentioned above. It establishes the Global Forum’s broad direction and defines the objectives, policy guidelines and budget for the secretariat, which is responsible for achieving these objectives.

WHAT ARE THE STRATEGIES OF THE GLOBAL FORUM TO ACHIEVE ITS OBJECTIVES AND WHAT ARE THE RESULTS TO DATE?

The strategies listed below are designed to be mutually supportive in pursuit of the objectives of the Global Forum.

STRATEGY 1: ORGANIZATION OF THE ANNUAL FORUM MEETING

Since the creation of the Global Forum in 1998, a forum meeting has been held each year. In recent years, this has involved over 700 partners from

about 100 countries. According to the external evaluation report of December 2001, “there is practically unanimous opinion that the Annual Forum meeting is a very useful and, in many ways, unique opportunity and market place where health problems and priorities are discussed by a variety of decision-makers, policy-makers and researchers. No other organization can replace the Global Forum as a convener of this type of meeting”.¹⁰

STRATEGY 2: ANALYTICAL WORK ON THE 10/90 GAP: METHODOLOGY FOR SETTING HEALTH RESEARCH PRIORITIES AND MEASUREMENT OF FINANCIAL FLOWS FOR HEALTH RESEARCH

In its analytical work, the Global Forum concentrated its efforts on the further development of a methodology for setting health research priorities and on the monitoring of financial flows for health research.

Methodology for setting priorities

Since the early 1990s, an attempt had been made to set priorities in health research based on a systematic assessment of the burden of diseases, identifying as a priority any disease representing a very high burden on the world’s health – as measured by Disability-Adjusted Life Years (DALYs) or other similar indicators – while research funding for that particular disease remained very limited as a percentage of total health research funding in the world. Following its review of the main methodologies existing in the field of priority-setting, the Global Forum developed the ‘combined approach matrix’¹¹ and applied it for the analysis of research priorities to a number of main diseases and risk factors at national and global levels, in particular to the following:

- malaria research
- tuberculosis research
- river blindness research
- schizophrenia research
- epilepsy
- newborn health research
- indoor air pollution
- diarrhoeal disease research in India
- national action plan for non-communicable disease prevention in Pakistan
- perinatal and neonatal care in Pakistan

A number of other applications are currently ongoing and are considered work in progress. In the application of the combined approach matrix for setting priorities, the strategy of the Global Forum has been to systematically highlight poverty and gender issues.

Monitoring financial flows into health research

In 1999, the Global Forum launched, together with a number of international partners, an initiative to monitor the financial flows into health research. The results of these investigations are as follows:

- Overall investments into health research increased from an estimated US\$ 85 billion in 1998 to about US\$ 160 billion in 2005.
- In 2005, public sector spending on health research amounted to about US\$ 66 billion, of which more than 90 per cent by high-income countries (HICs) and less than 10 per cent by low- and middle-income countries (LMICs).
- Private for-profit companies spent an estimated US\$ 81 billion on health research in 2005 – mostly in HICs.
- The balance of US\$ 13 billion was invested by private not-for-profit companies, of which more than 90 per cent in HICs.

It can be argued that health research in HICs have a trickle-down effect on LMICs, but often these research outputs do not address the most pressing health issues in LMICs; or they may be too expensive (technologically

¹⁰ Binka, Fred, Holmgren, Jan and Murthy, Nirmala. Findings from the External Evaluation. A report to the Foundation Council of the Global Forum for Health Research. December 2001.

¹¹ The combined approach matrix incorporates the criteria and principles for priority-setting defined in the Essential National Health Research approach, the Visual Health Information Profile proposed by the Advisory Committee on Health Research, and the five-step process of the Ad Hoc Committee on Health Research (magnitude of disease burden, determinants, present level of knowledge, cost-effectiveness of interventions, resource flows). These five steps are linked with the four broad groups of actors and factors determining the health status of a population to form a proposed matrix for priority-setting.

complex, cold-chain dependent) for LMIC healthcare systems to support; or, most inappropriately, LMIC healthcare systems may take on HIC-generated solutions that serve a disproportionately low share of health issues in these countries at a disproportionately high price.¹² The solution to the 10/90 gap issue is therefore for LMICs to increase their investment in health research focusing on problems that are specific to them, and for HICs to increase the share of their research spending on LMIC health priorities.

STRATEGY 3: SUPPORTING NETWORKS IN HEALTH RESEARCH

The Global Forum supports networks in health research, bringing together a wide range of partners in priority health areas, thereby attracting new financing. A few examples of networks created and/or supported by the Global Forum are as follows:

- Alliance for Health Policy and Systems Research
- Initiative on Cardiovascular Health Research in Developing Countries
- Child Health and Nutrition Research Initiative
- Medicines for Malaria Venture
- Sexual Violence Research Initiative
- Global Network for Research in Mental and Neurological Health
- Road Traffic Injuries Research Network

STRATEGY 4: INFORMATION AND COMMUNICATION

The fourth strategy of the Global Forum concerns what is known about the 10/90 gap and how to use this knowledge to bring about change. The Global Forum's main publications include The 10/90 Report on Health Research, the Global Forum Update on Research for Health, Monitoring Financial Flows for Health Research, and other key publications on priority-setting methodologies, as well as publications by networks supported by the Global Forum.

4. HAS THE INVESTMENT MADE BY SWITZERLAND IN THE GLOBAL FORUM FOR HEALTH RESEARCH BEEN EFFECTIVE?

About 22 per cent of the Global Forum secretariat's core budget was financed by the Swiss Agency for Development and Cooperation (SDC) of the Swiss Ministry of Foreign Affairs between 1998 and 2008. This included the secondment of the executive secretary for the period 1998–2003. Was this money well invested? Was this investment by donors cost effective?

It is difficult to quantify the results of the activities of the Global Forum for Health Research over the past ten years for two main reasons: firstly, some outcomes are the result of the actions of a large number of actors and not only of the Global Forum; secondly, a number of effects are indirect and/or will only be felt in the long run, such as the contribution to growth, reducing poverty or increasing security. Nevertheless, the following can be said about the results that can be attributed primarily to the actions taken by the Global Forum:

- From a relatively unknown concept ten years ago, the 10/90 gap in health research is now well known in the international development community and considered as representing an unacceptable misallocation of resources at global level.
- An intensive discussion around priority-setting in health research has been launched. The combined approach matrix methodology developed by the Global Forum integrates all major characteristics of methodologies previously developed. This debate has led many institutions to review their priorities in health research and bring them more into line with the burden of disease at the international and national levels, thereby gradually contributing to the correction of the 10/90 gap.
- Each year, the Global Forum meeting contributed to a systematic review of the progress made in correcting the 10/90 gap in health research in its various dimensions at the level of major diseases and risk factors.
- The monitoring of resource flows for health research under the leadership of the Global Forum has brought crucial information to the attention of decision-makers in low- and middle-income countries, as well as in high-income countries.

- The Global Forum also played a key role in the development of a number of international health research networks, in particular those listed above (under Strategy 3). These networks are believed to have made and continue to make a unique contribution to attracting greater resources in these priority areas for health research, thereby contributing to the correction of the 10/90 gap.

Thanks to these actions, it is hoped that hundreds of millions of dollars have already been and will continue to be reallocated from low-priority to high-priority health research projects. This is an important factor in achieving the health-related Millennium Development Goals.

5. POLICY IMPLICATIONS: THE BENEFIT OF A BILATERAL CONTRIBUTION TO A MULTILATERAL PUBLIC–PRIVATE PARTNERSHIP (PPP)

The key question is the following: has the Global Forum for Health Research – or, more generally, have international public–private partnerships in the health sector supported by Switzerland – delivered better health services to poor populations in developing countries than would have been the case had the same resources been invested, separately and individually, by each institution participating in the public–private partnership? To answer this question, we must first evaluate the benefits and costs of each PPP.

The benefits of PPPs can be summarized as follows:

- They bring together partners (governments, UN organizations, universities, research institutions, civil society organizations, private companies and media) with very different skills and resources to achieve a goal that is normally not attainable by individual action, due to the sheer scale of the problem. In these circumstances, solutions must be found by the joining of forces of a large number of institutions, at the local, national, regional and global level.
- They help mobilize public and private funds that would probably not be otherwise mobilized, or not in the same amounts (for

example, The Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Global Alliance for Vaccines and Immunisation).

- They stimulate greater efficiency through a continuous dialogue between the partners on problem definition, policies, strategies, priorities and solutions.
- They apply a multidisciplinary approach to problem-solving, due to the diversity of the partners.
- The partners have more weight when advocating together to solve a problem than each institution would have if acting alone.

But PPPs also have costs:

- For small-scale PPPs, administrative costs may account for a relatively high proportion of the total budget. In these cases, it is important for the PPP to reach a critical size.
- Some PPPs develop vertical disease-oriented strategies and decision-making structures with the risk of by-passing national health systems or diverting resources away from them. It is therefore important to ensure that these vertical structures link up systematically – and are integrated at key levels – with the national health systems.

The result of this benefit–cost analysis will indicate where and when to use PPPs to help deliver health services to the poor in developing countries more efficiently. Many PPPs over the past two decades have shown high returns for the investment made. We believe this is the case, among other examples, for the Global Forum for Health Research, the Medicines for Malaria Venture, The Global Fund to Fight AIDS, Tuberculosis and Malaria, and the Global Alliance for Vaccines and Immunisation.

SUPPORTING NATIONAL RESEARCH FOR HEALTH: THE WORK OF THE COUNCIL ON HEALTH RESEARCH FOR DEVELOPMENT (COHRED), 1993–2009 AND BEYOND

Martine Berger, Daniel Mäusezahl

INTRODUCTION AND OVERVIEW

This paper describes a 15-year strategic partnership between the Swiss government and COHRED. It illustrates how such collaboration helps governments provide effective and sustained support to countries, and how it offers continuous learning between countries and development agencies on how best to manage development for health over the long term.

The promotion of health research as a tool for development is a fairly recent trend, emerging from discussions that took place in the late 1980s and early 1990s within the international health community. In the belief that research on health could have enormous and often neglected potential in development, a group of donors first formed an independent international commission – the Commission on Health Research for Development¹³ – in 1987, with the aim of improving the health of people in the developing world by focusing on research in and by developing nations and on disease priorities of their concern.

The Commission highlighted, among other things, the inequity between global health research spending – mostly in developed countries – and global health research needs – mostly in developing countries. This inequity has subsequently become known as the ‘10/90 gap’. The Commission further recommended that all countries undertake Essential National Health Research (ENHR)¹⁴.

A Task Force on Health Research for Development was set up to consider how to implement the Commission’s recommendations and further

¹³ Hereafter referred to as the Commission.

¹⁴ Commission on Health Research for Development. Health Research: Essential Link to Equity in Development. Oxford University Press, 1990.

develop the concept of Essential National Health Research, and how to ensure its implementation. The ENHR approach was first tested in Uganda in 1992. The Council on Health Research for Development (COHRED)¹⁵ was then established, in 1993, as a non-governmental organization (NGO), with the status of a Swiss foundation in Geneva.

Over the years, the focus of COHRED's work has expanded from supporting ENHR to developing and strengthening national health research systems (NHRS). COHRED reinforced its role as a facilitator, enabling countries to better identify, express and address their health research needs and build up research management capacity at national and regional level. The COHRED of today has developed into a Southern alliance, amplifying the 'voice of the South' in health research. It also plays the role of broker between the South and North, with a mission to enable low- and middle-income countries to build strong research systems and research capacity. Switzerland was active in terms of the work of the Commission and task force and, along with a few other countries, has played a prominent role in creating/founding COHRED and shepherding the process up until the present.

For almost two decades, Switzerland has been particularly proactive in the area of research for health and development. It has been vigorously involved with COHRED since 1993, and with the Global Forum for Health Research since its inception in 1998, convinced that two key actors with complementary core competencies and roles in country and regional work and global policy dialogue can effectively foster a bidirectional exchange from country experience to global policy and vice versa. The goal shared by the Global Forum and COHRED – to increase the impact of global and national health research and health research systems on the health of the poor and on the development of low- and middle-income countries – was very much in line with the policy and strategy of the Swiss Agency for Development and Cooperation (SDC).

1. ADVOCATING FOR THE IMPORTANCE OF HEALTH RESEARCH AT NATIONAL LEVEL

COHRED was established to promote – at country level – Essential National Health Research as a comprehensive strategy for organizing and managing national health research. Its mission was to help place health research at the forefront of national health and development efforts. It strived to enable the poorest countries to build up their research capacity to sustainably improve health, reduce health inequity and promote development.

COHRED's focus was on ENHR during most of the first decade; it developed an ENHR network, documentation and library. Initially conceived as a small support secretariat, COHRED mostly worked through national research institutions and networks. Its work relied on key individuals at country level.

The 1990s saw a number of developments in the global health research arena, which, ten years later, would place health at the centre of development and health research as an essential tool to drive equitable development.

- In 1993, the World Bank, in its World Development Report¹⁶, provided a first convincing argument for investing in health as a tool for, rather than a cost to, development.
- In 1994, WHO set up an Ad Hoc Committee on Health Research Relating to Future Intervention Options to address priorities for health research and development.
- In 1998, the Global Forum for Health Research (GFHR) was formed to implement another recommendation of the Commission: to address disparities in global health research funding and optimize the benefits of health research. The GFHR's global viewpoint complemented COHRED's, which focused on the needs and perspectives of developing countries.

Switzerland, willing to better address the development needs of the poorest countries, supported the work of the Commission and the task force. As one of the first contributors to COHRED, and as a co-founder of GFHR, it played an important part in focusing global attention on the central role of health research and in strengthening the voice of low- and middle-income countries in health debates.

2. BANGKOK: FROM ESSENTIAL HEALTH RESEARCH TO A SYSTEM APPROACH

Towards the end of the decade, COHRED recognized the need to adopt a systems approach to support the use of the toolkits and instruments it had developed for national health research priority-setting and capacity-building by a broader range of health research stakeholders, research users and decision-makers. COHRED began to move towards health research capacity development at the institutional and system level, exploring the potential and synergy between all the actors in health research at national and global level ¹⁷.

In 2000, COHRED, together with the Global Forum for Health Research, WHO and the World Bank, convened the first International Conference on Health Research for Development in Bangkok, Thailand. This was the first opportunity to review progress made in strengthening health research since the Commission's report in 1990.

COHRED played a central role in mobilizing and organizing the regional inputs into the conference. As a member of the international steering committee and through its membership of both the COHRED board and the GFHR Foundation Council, Switzerland was closely involved in the preparatory process. It supported the regional processes which examined successes and failures in establishing national research as essential for spearheading and guiding development in low- and middle-income countries. Regional discussions – and the subsequent debates during the conference in Bangkok – confirmed the need to move from advocacy and individual capacity-building for health research towards a more systemic approach of reinforcing mechanisms of priority-setting and coordination, and building up institutional rather than individual capacities. This approach was to become known as national health research systems (NHRS).

The Bangkok conference proved to be a turning point, moving from a focus on ENHR to the development and empowering of national health research systems ¹⁸. The need for better synergy between all actors in health research was also recognized. The conference acknowledged that all stakeholders – from public to private sector (for profit and not for profit), nationally and globally – had complementary roles to play in strengthening

health research, improving health and contributing to development. It was agreed that, rather than creating a single, overarching structure for governing and managing health research internationally, the many different health research actors should learn how to better articulate their respective activities by exploiting existing networks.

3. BANGKOK TO MEXICO: HEALTH SYSTEMS AND GLOBAL LEADERSHIP

The Bangkok conference was a flagship event for health research and moved it up the international agenda. In particular, WHO, which was seen by participants as being a key player to provide health research leadership, started questioning its role in the field. This move was welcomed and supported by many WHO member states, including Switzerland. Unfortunately, subsequent changes in the WHO leadership and international priorities considerably slowed down its rationalization and coordination of research activities and internal conceptual thinking about the organization's role in health research.

The focus on NHRS was lost. And COHRED took some time, working with countries, to develop a comprehensive conceptual framework for the better management of national health research.

In the following years, a few forward-looking donors, including several Nordic countries and Switzerland, kept the Bangkok spirit alive and consistently advocated for a more strategic approach to health research by WHO, and a more systemic approach to health and development by all actors. Switzerland strengthened its support for activities designed to put low-income countries in the driving seat, by building up capacities and improving national health sector management, for example, by financing health system activities at WHO. It also helped COHRED and its partner countries assess and reinforce their health research systems.

But progress at that time failed to live up to expectations, even at the advocacy level. The unique contribution of health research to development remained under-acknowledged. While health research was to be the topic of *The World Health Report 2004*, changing priorities and increasing concerns about AIDS resulted in it being dropped. Health research was subsequently addressed by a technical report entitled *World Report on Knowledge for*

¹⁷ IJsselmuiden, C.B. 'Towards unity for health: time to think systems' in *Education for health*, Vol. 20, Issue 2, p. 59, August 2007. Abingdon, UK.

¹⁸ Kennedy, A., Khoja, T.A., Abou-Zeid, A.H., Ghannem, H., IJsselmuiden, C. and WHO-EMRO/COHRED/GCC NHRS Collaborative Group. 'National health research system mapping in 10 Eastern Mediterranean countries' in *Eastern Mediterranean health Journal*, 14(3): 502–17, 2008.

*Better Health*¹⁹, which was launched at the second International Conference on Health Research in Mexico in 2004.

During these early years of the new millennium, a small group of bilateral donors, which included Switzerland, anticipated a renewed interest in health research and its huge potential for improving the health of people in less developed countries where research may not necessarily be seen as an immediate priority. They formally asked WHO to undertake a review of its research activities and develop a health research strategy.

At the same time, these actors saw value in supporting and stimulating reflection outside WHO on the respective roles of the various players in health research in order to improve the breadth and relevance of the discussions. Switzerland was particularly interested in raising, at international debates, the views and needs of low-income countries. It regarded COHRED as a useful partner in assisting in this effort, and supported COHRED initiatives aimed at strengthening these countries' voices in the global health research debate.

Moving towards a structured, systemic approach to strengthening health research at country level was also a lengthy, iterative and creative process for COHRED, both internally and in its dealings with key partners and visionary think tanks. The turning point was around 2004 when COHRED rebuilt itself, adopting a systemic view, revitalizing the earlier idea of NHRS and developing frameworks and concepts to support its implementation, building up its expertise in priority-setting for health research, developing tools, publishing case studies, and advocating for and helping countries to implement NHRS. By the time of the Mexico conference, the concept was refined enough and had begun to be tested at national level, in time for informing new debates at the conference.

4. BETTER UNDERSTANDING THE SYSTEMS: THE MEXICO CONFERENCE

In 2004, WHO and the Mexican government convened the second International Conference on Health Research, which included a ministerial summit. This international event was designed to build momentum for the global initiative to strengthen health systems through research. In the process, it was to help achieve the United Nations Millennium Development Goals. There was greater focus on country needs, which by now were being increasingly recognized²⁰.

The central topic of the Mexico conference was health systems research and the use of knowledge and research results. While the need to better understand the nature of health systems and how to put their essential building blocks in place was recognized, the specific nature of health research systems, their main components and their specific needs in terms of capacity and human resources were not particularly well addressed. Some confusion was created by the use of the terms 'health system research', referring to the research needed to better understand the nature and functioning of a health system, and 'health research system', referring to the range of mechanisms and interactions, as well as research infrastructure – including human resources – that allow research to be adequately and efficiently performed and used by the government, research institutions and the community in a given country.

The Mexico conference contributed greatly to moving health research much higher up the international agenda. As a result, the next World Health Assembly adopted a resolution requesting WHO to review and rationalize its internal activities in health research, and to develop a health research strategy spelling out its role in health research, including with regard to the other key players. This provided a welcome boost to the discussions on health research in and around WHO.

Once more, Switzerland appreciated COHRED's specific call for a greater focus on countries' self-defined health research needs and supported its efforts to highlight key messages in the post-Mexico debate. In particular, the importance of human resources for health research as a key component of sustainable health research systems was underlined.

19 World Health Organization. World Report on Knowledge for Better Health: Strengthening Health Systems. Geneva: World Health Organization, 2004.

20 Pang, T., Pablos-Mendez, A. and Ijsselmuiden, C. 'From Bangkok to Mexico: towards a framework for turning knowledge into action to improve health systems' in Bulletin of the World Health Organization, 82(10): 720–1, October 2004.

5. MEXICO TO BAMAKO: FROM 'HEALTH RESEARCH' TO 'RESEARCH FOR HEALTH'

Another paradigm shift in health research was taking place: 'health research' was changing to 'research for health', that is, to the undertaking of health-related research in sectors other than health (for example, science and technology, water and sanitation, environment), and to the broader concept of innovation, building greater synergies particularly between the health, and science and technology sectors to meet the challenges of research and innovation for health²¹.

February 2004 saw the launch, by the director-general of WHO, of the Commission on Intellectual Property Rights, Innovation and Public Health (CIPH). The commission, headed by the former president of the Swiss Confederation, Ms Ruth Dreifuss, published its report, Public health, innovation and intellectual property rights, in 2006. Research and development were obviously at the heart of concerns around innovation and intellectual property rights, adding to the challenges at the Bamako conference in 2008.

The third International Conference on Health Research in Bamako, Mali, in 2008, was consequently billed as a 'Global Ministerial Forum on Research for Health'. Increasingly multisectoral and multidisciplinary, it brought together the ministers and key players of science and technology, as well as of health. This was recognition of the key contributions made by sectors other than health to the improvement of human health²². The prominent place given in the conference to the presentation of the results of the work of the Commission on Social Determinants of Health confirmed this extended vision of research for health.

COHRED, which started in the mid-2000s to develop partnerships with actors in the education as well as in the science and technology sectors, was well placed to share informative experiences with the participants of the Bamako conference.

As we enter a new decade, COHRED continues to work with countries to enable them to put in place their national health research systems. After more than ten years of relentless advocacy, NHRS is becoming a recognized

concept. WHO has adopted NHRS as its focus for support²³, and more and more countries are developing health research policies and organizing the management of their research for health.

Low-income countries are increasingly becoming better prepared and equipped to negotiate with external research funders to obtain assistance for a research agenda that fits in with their self-defined needs²⁴. Unfortunately, they are still too few in number to move towards greater equity in health research.

6. 2009 AND BEYOND: NEW CHALLENGES, DONORS' HARMONIZATION AND ALIGNMENT ON COUNTRIES' NEEDS

Many new actors are involved in the field of research for health. This mass of new organizations, some of which have highly specialized and/or narrow approaches and tend to be vertical, is overburdening countries with uncoordinated offers and requests.

In 2005, following the adoption of the Paris Declaration on Aid Effectiveness, Ownership, Harmonisation, Alignment, Results and Mutual Accountability, COHRED and Switzerland began to advocate for aligning donors' health research priorities to country needs and for harmonizing their processes to alleviate the workload at country level. The GFHR's annual forum meeting, held in Beijing in 2007, provided COHRED with an opportunity to convene a meeting of donors and developing country actors to discuss donor alignment and harmonization in a neutral, supportive environment.

Although the current massive research agenda involves developing countries to some extent, it is still largely driven by the views and agenda of Northern donors, and tends to concentrate on the so-called 'big three': HIV/AIDS, malaria and tuberculosis. These are just a few of the immediate needs. Other challenges concern areas such as innovation and intellectual property, public health versus trade, and economic versus social development.

Low- and middle-income countries still have limited influence on international decisions affecting their health and development. Despite

21 Soskolne, C.L., Butler, C.D., Ijsselmuiden, C., London, L. and von Schirmding, Y. 'Toward a global agenda for research in environmental epidemiology' in *Epidemiology*, 18(1): 162–6, January 2007.

22 Ijsselmuiden, C., Matlin, S.A., Maiga, A.H., Hasler, J., Pannenberg, O., Evans, T., Pang, T., Gardner, C.A. and the Steering Committee of the 2008 Global Ministerial Forum on Research for Health. 'From Mexico to Mali: a new course for global health' in *The Lancet*, 371(9607): 91–3, 12 January 2008.

23 See the WHO Health research strategy proposed for adoption by the World Health Assembly in May 2009.

24 Sewankambo, N. and Ijsselmuiden, C. 'Responsive research in developing countries' in *The Lancet*, 372(9632): 11–3, 5 July 2008.

the fact that the recent successful WHO negotiations on public health, innovation and intellectual property²⁵ demonstrated real progress, many such negotiations are difficult to access and are too time-consuming for countries with scarce resources, although they may well be the most affected by the decisions taken.

NGOs like COHRED have proved they can convey, strengthen and support (with case studies, evidence and arguments) the positions and interests of low-income countries. They can play the role of honest broker and take some of the debates onto more neutral ground, where no immediate political commitment is needed but where difficult issues may be openly debated, thereby enabling it to gradually develop solutions acceptable to all parties. COHRED, as a Southern alliance with key Northern partners and counting Switzerland among them, is a broker to whom donors can turn if they do not have direct access to countries. Donors can also work with COHRED to ensure long-term commitment and sustainable support, which is so important for development, as COHRED can engage in long-term relationships that donor countries may not always be able to maintain efficiently.

7. CONCLUSION

Institutions like COHRED, an NGO perceived as independent and neutral, have easy access to many partners from the public as well as private sectors. Bilateral agencies may find it easier to mandate NGOs to discuss new or sensitive issues with potential partners in a non-committal manner, freely exploring new avenues and solutions without being bound to work according to government rules. NGOs can interact with any knowledgeable and relevant partner regardless of hierarchy, existing political tensions, or geographical or economic divisions.

In the complex, rapidly evolving environment of aid and development, with a broad array of partners, the successful experience of Switzerland and COHRED over more than a decade illustrates how strategic partnership between an NGO and a government can add value to development strategies and support national partnerships and the delivery of programmes in a sustained manner. Working through non-governmental partners enables government agencies to take measured risks, test creative views and break new ground in sensitive or innovative areas. Governments' bilateral diplomacy and NGO engagement can be truly complementary and of mutual benefit for health, equity and development.

Finally, health research as such is being increasingly valued in international negotiations as a key contributor to health, development and global stability. It plays a role in maintaining an effective policy dialogue among governments and their strategic partners when addressing global health issues. In this context, partnerships like the one between Switzerland and COHRED, which focus on needs-driven health research for improving health development and equity, will provide a more valuable contribution to global health diplomacy than ever before.

APPLYING A SECTOR-WIDE APPROACH TO THE HEALTH SECTOR: SWITZERLAND'S EXPERIENCE IN MOZAMBIQUE IN THE 1990s

Ambassador Thomas Greminger²⁶

INTRODUCTION

This article attempts to provide a brief historical and analytical overview of Switzerland's experience with sector-wide approaches (SWAPs) in the particular context of the Mozambican health sector reforms in the 1990s. As the country emerged from civil war, the rapid rise in the number of governmental and non-governmental donors and the corresponding increase in the scope and number of projects represented a challenge for the authorities. Despite good intentions, fragmented aid provided by a variety of actors to a structurally weak state increased donor dependency while national capacities and service delivery remained insufficient. The consequences were particularly severe in Mozambique's shattered health sector, where the prevention, detection and treatment of illnesses and injuries, particularly in rural areas, remained well below an acceptable minimum level. In a bid to counter this phenomenon, new financing mechanisms for developing countries, such as sector-wide approaches, emerged after the late 1980s.

Switzerland was among the first bilateral donors in Mozambique to embrace the SWAP methodology for health reform through individual, incremental building blocks in the early 1990s – well before the adoption of the Paris Declaration on Aid Effectiveness in 2005. A SWAP effectively combines, in one coherent concept, the flagship principles of contemporary development cooperation, such as local ownership, donor coordination and harmonization of instruments. What led Switzerland to take this bold step,

²⁶ The author would like to thank Dr Enrico Pavignani for having helped him conceptualize these thoughts back in the years when he served as a health adviser to the Swiss Cooperation Country Office in Maputo, as well as Oliver Höhne for his contribution.

and what were its experiences subsequent to this decision? What tools did Switzerland seek to introduce to push for health sector reform, and what can be said about different approaches on the way to a true SWAP? The first part of this article reviews the challenges facing the Mozambican health sector in the early 1990s and how Switzerland and its partners decided to respond. It argues that budget support, resource-pooling arrangements, integrated provincial planning and other measures proved instrumental in transforming health service delivery in Mozambique. In the second part, the overall approach leading to a fully-fledged SWAP in Mozambique is discussed, highlighting significant differences between an 'incremental' and a 'drawing board' approach. In the third part, the potential gains and pitfalls of introducing a health SWAP and its individual components are reviewed. The lessons learnt from Switzerland's experience in the Mozambican health sector, while essentially of a historic nature, may provide a useful insight for numerous fragile states today.

1. ADDRESSING THE CHALLENGES FACING MOZAMBIQUE'S HEALTH SECTOR IN THE EARLY 1990s: AN INCREMENTAL APPROACH TO A HEALTH SWAP

The Rome General Peace Accords, signed in October 1992, brought an end to decades of civil war in Mozambique between government forces and the rebel movement, Renamo. Mozambique's health sector – already fragmented and biased towards urban and curative services at the time of independence in 1975 – had been seriously ravaged by the long years of fighting²⁷. With the end of hostilities and the prospect of durable recovery, the number, funding and scope of projects by bilateral and multilateral donors and non-governmental organizations (NGOs) increased dramatically. Areas of significant donor involvement included education, health, energy, rural infrastructure, governance as well as private sector development. However, as the Mozambican public sector remained marked by numerous weaknesses, including dysfunctional management systems, skill shortages and outdated regulatory frameworks, this rise in financial and personnel support overwhelmed national absorption capacities at all levels. Mozambique – already the largest single recipient of foreign aid in

Africa in absolute terms – quickly turned into one of the most donor-dependent countries in terms of its GNP²⁸.

The health sector was no exception in this problematic development. Scarce government resources destined for the health sector were dwarfed by massive aid projects, disempowering the government. This was exacerbated by the fact that most health projects were implemented directly by development agencies and NGOs, without coordination among donors and according to a strictly vertical logic. Furthermore, unequal attention across regions and administrative entities resulted in a geographical and vertical fragmentation of this external support. In the absence of reliable information and indicators on existing resources and service outputs, projects lacked the required baseline data to shape their direction. Finally, proper financial management practices were often abandoned, both by donors and recipients.

INTRODUCING BUDGET SUPPORT

It was in this difficult environment at the beginning of the 1990s that Switzerland's Agency for Development and Cooperation (SDC), together with UNICEF, pioneered the application of a new tool to support the reform of Mozambique's health sector: direct budget support to provincial health authorities. Switzerland had already increased its overall cooperation budget for Mozambique as the war was coming to an end, and had been the only donor to support the government's first demobilization project, agreed upon prior to the conclusion of the Rome Peace Accords²⁹. In opting for budget support to the health sector, SDC and UNICEF took a calculated risk, running against the received wisdom, which considered such a step too risky. This decision was based on three factors:

- Firstly, the donors ascertained that direct support of the government health budget would not substitute existing funding but, rather, complement it by making additional resources available.
- Secondly, a clearly defined target of the budget support measures

²⁸ From 1994 to 1999, Mozambique received a total of US\$ 4.7 billion of foreign aid. In 1997, aid amounted to 37 per cent of GNP, which was surpassed only by Guinea-Bissau with 50 per cent. Pavignani, E. and Hauck, V. Pooling of Technical Assistance in the Context of Aid Management Reform: The Mozambique Case Study. ECDPM Technical Assistance Study, p. 8, 2001.

²⁹ Gloor, A. and Greminger, T. Integrating Macro and Micro Approaches: The Case of Swiss-Mozambican Cooperation. Contribution to the June 2000 Social Summit and Workshop on International Cooperation for Social Development (CSND), p.4, 2001.

²⁷ Martínez, J. Implementing a sector wide approach in health: the case of Mozambique. HILSP Institute, 2006.

was identified. In this case, deprived communities in peripheral areas of Mozambique were to be the main beneficiaries of health service reform.

- Thirdly, previous interaction had helped form a relationship of trust between donors and the leadership of the Ministry of Health. As shown below, trust constitutes a key component in the success of a SWAP. In contrast to the project approach, donors gradually relinquish full control over funds in the SWAP model. Both sides in the partnership therefore need to ensure agreement on the reform strategy, which aims to bring about gradual improvements in local capacities and institution-building. Mutual commitment to the principles of good governance is also required, as is a willingness to engage in intensive political dialogue with all relevant actors.

The central goal of the budget support involved boosting the delivery of government health services through a direct injection of resources to provincial budgets for recurring expenses. According to the agreed methodologies, the government accounted separately for the funds received through the budget support. These funds were directly managed and disbursed by the government in close cooperation between national and provincial levels, and between the Ministry of Health and the Ministry of Planning and Finance.

Several direct and indirect benefits deriving from the budget support can be identified. These include the following:

- a significant increase in the financing of health services, leading to improved service delivery and increased morale amongst government health staff
- the identification and subsequent reduction of funding imbalances across provinces and areas of work
- the introduction of sound administrative and financial practices across the Ministry of Health

Improved service delivery was reflected, among other things, by official figures from the Mozambican national health service, covering the period

1993 to 1999. According to these figures, overall national health service output increased by 114 per cent for outpatient consultations, by 96 per cent for mother and childcare contacts, by 48 per cent for birth deliveries, and by a massive 222 per cent for immunizations. These impressive figures, while not solely achieved through the budget support, do indicate important advances in the area of service delivery within the context of this donor-supported health sector reform.

Indirectly, budget support helped address a range of other critical issues. Weaknesses in government management, when it came to managing and absorbing additional financial resources, became evident. This, in turn, led to the creation of a long-term initiative by SDC to strengthen management capacity at the Ministry of Health, as well as support to improve the institutional capacity of the Ministry of Planning and Finance. The transparency required by separate accounting enabled previously unnoticed administrative malpractices to be detected. These were addressed over time, thereby helping to improve the overall functioning of government health services. In addition, budget support resulted in the collection and analysis of reliable health-related information and indicators, allowing improved resource allocation according to newly developed objective criteria. Crucially, budget support also contributed to greater coordination among donors and NGOs, thus helping to foster complementarity.

It should be stressed that this initial phase did not yet correspond to the purest form of budget support, whereby funds would be entirely managed by local institutions and be completely based on local budget procedures. This goal cannot realistically be achieved in a single step. Rather, Switzerland's experience with health sector reform in Mozambique reflected the importance of proceeding gradually. As a result, several instruments were introduced over time within the overall logic of budget support, such as integrated provincial planning, resource-pooling arrangements, joint auditing and donor coordination. Taken together, these tools paved the way for a more sophisticated form of budget support and ultimately laid the foundations for a truly sector-wide approach to the reform of public health in Mozambique.

INTEGRATED PROVINCIAL PLANNING

Integrated provincial planning (IPP) is a planning and management tool aimed at ensuring a match between, on the one hand, required input and resources and, on the other, desired outputs and activities. In Mozambique, IPP was carried out as a bottom-up exercise whereby Ministry of Health district and provincial officials would interact with donors and NGOs at the provincial level as well as at the ministry's headquarters. This methodology was refined over time and became a key building block in SDC's health SWAP in Mozambique. The success of this tool was reflected in increased institutional capacity at the Ministry of Health and by the subsequent decision of the Ministry of Planning and Finance to change its own budgeting and planning methodology. However, several factors hindered institutional development, including high turnover of health ministry staff and an insufficient presence in terms of donor and NGO staff at the provincial level ready to support the IPP process. Experience showed that the capacity of financial administrations is often a particularly weak link when it comes to implementing SWAP building blocks. Solutions can consist of mutual audits combined with support to strengthen financial management capabilities.

RESOURCE-POOLING ARRANGEMENTS

Another keystone in SDC's approach to health sector reform in Mozambique consisted of resource-pooling arrangements. These arrangements are a special form of earmarked budget support targeting a particular area or component that is critical for the functioning of the health system. Pooling arrangements were put in place for drugs imports, recurrent expenditure as well as for covering staff costs when deploying medical specialists at provincial level. To a certain extent, these arrangements served as a sub-sector SWAP, addressing a particularly urgent dimension of the health reform agenda. At an initial stage, resource-pooling arrangements tend to be managed by a donor but are then gradually handed over to the respective authorities at district, provincial and central levels. In the case of Mozambique, the first two pooling arrangements were run by SDC and subsequently succeeded in attracting the support of further bilateral donors. The third arrangement was administered by the United Nations Development Programme (UNDP) under the overall responsibility of the

Mozambican health ministry. As a result of these arrangements, coherence among donors, as well as between donors and the government, increased both in terms of procedures as well as priorities and criteria for resource allocation. In addition, transaction costs fell and fund-raising processes became more focused and effective. However, setting up resource-pooling arrangements proved to be time-consuming, whilst the government's implementation of the rules prompted by the earmarking turned out to be problematic. Another drawback of pooling arrangements was found in its tendency to accentuate centralist and bureaucratic procedures. Over time, this was addressed by introducing planning methodologies that focus specifically on decentralized and participative decision-making.

2. TOWARDS A FULLY-FLEDGED HEALTH SWAP IN MOZAMBIQUE: A CHOICE BETWEEN TWO DIFFERENT APPROACHES

The gradual introduction of the different instruments described above reflects the underlying methodology used by SDC in Mozambique to follow an incremental approach to the health SWAP. Rather than starting all SWAP-related activities at once, in a one-size-fits-all logic, this approach was characterized by a step-by-step process whereby a range of building blocks were introduced, tested and, if necessary, adapted over time. In situations of low government capacity, this approach seems the most appropriate. By its very nature, this approach takes more time, may be more contentious and conflictual, and involves a variety of discussion venues and decision-making bodies. Nevertheless, based on empirical evidence, it is arguably more likely to produce tangible progress at every stage of the process. In parallel with the incremental approach to the health SWAP, Switzerland carried out an extensive policy dialogue with the Mozambican government. This enabled Switzerland to accompany the reform programme with an informed exchange with its counterparts, enabling the ministries to build capacity and implement reforms through existing structures. Again, this way of working requires time and patience, but may pay off in the long term.

By contrast, the drawing board approach attempts to establish a fully-fledged comprehensive SWAP in one single step. This approach is

characterized by a prescriptive and more abstract logic. While the nature of debates in this approach may result in a shallow consensus involving all actors and covering all policies, it risks leading to a make-or-break situation resulting in a high degree of frustration by all actors in the event of failure.

FROM INCREMENTAL TO DRAWING BOARD

During the second half of the 1990s, the concept of a SWAP for Mozambique's health sector became increasingly topical among the donor community. Numerous key actors considered the building blocks set up by SDC and others up until that stage, such as budget support and pooling arrangements, suitable for the consolidation of a fully-fledged SWAP. Thus, a number of like-minded donors favoured a cautious and progressive integration of these building blocks. However, in 1997 the Ministry of Health decided informally to opt out of the incremental approach and to begin a comprehensive policy-formulation exercise. This continued for several years without resulting in firm commitments or clear policies until the formal strategic decision to establish a health SWAP was taken in 2000. As part of this fully-fledged SWAP, a health sector strategic plan, a code of conduct – the so-called Kaya Kwanga Commitment “to guide the partnership for health development in Mozambique” signed in the same year³⁰ – various working groups and review mechanisms, and a financing framework were set up. The government's turnabout may, in part, have been motivated by the health ministry's desire to reassert its leadership, by the will of the World Bank and the World Health Organization to reclaim centre stage in the development debate in Mozambique, as well as by tactical mistakes on the part of SDC, which had become over-stretched and too emboldened by earlier successes.

In fact, SDC's role as a coordinator had not been without controversy among the donor community. Its assertive role in information-sharing, policy formulation and consultation was, at times, met with suspicion and later outright opposition by some agencies. Nevertheless, several of the policies introduced by SDC gradually found acceptance with many of these other agencies. Budget support, in particular, gained in popularity despite known difficulties in terms of absorption capacities and institutional capabilities. With hindsight, it became clear that several of the management instruments or building blocks that SDC sought to put

in place in Mozambique had, to a great extent, resulted in success, such as budget support, pooling arrangements for drugs, joint auditing and donor coordination. However, other elements, such as the integration of vertical programmes, the health sector recovery programme and the formulation of integrated strategies did not have a positive conclusion. The next section of this article will examine some of the key lessons of this experience in more detail.

3. EVALUATION: KEY LESSONS LEARNT

Several key lessons emerged from Switzerland's experience in supporting an incremental approach to a health SWAP during the 1990s, which are summarized below.

- **Build up a relationship of trust.**
A key to the success of any SWAP is that all partners focus their efforts on locally based strategies. A relationship of trust must prevail between development partners and their local counterparts.
- **Ensure consistent local leadership.**
Given that diverse interests will inevitably pull decision-makers in different directions, it is essential that local management is fully committed to the reform efforts as foreseen by the SWAP. This is particularly relevant once the donor community reduces its promotion of an instrument and thereby provides the opportunity for the authorities to take over.
- **Remain open to new information.**
The local management must be willing to integrate new evidence as it becomes available, rather than making opportunistic choices.
- **Provide full support for the instruments chosen.**
The experience in Mozambique demonstrated that the success or failure of particular building blocks or management instruments depended more on the actual support and effort provided for their implementation, rather than on the merit of the tool itself. Over-stretched capacity on the part of the donor therefore often had a detrimental impact on some tools for which full support could not be provided.

³⁰ See www.misau.gov.mz/pt/cooperacao/swap. The document was subsequently revised in 2003. See also Martínez, op. cit.

→ **Build up institutional memory.**

Key actors must ensure that institutional memory is built up and preserved in order to provide guidance regardless of staff turnover.

→ **Accept and manage controversy.**

Direct partnerships between development actors and local agencies are inherently controversial and interaction tends to involve wearisome discussions and procedures. However, this may be worth the effort as such interaction defuses tensions. As such, skilful management of people is also required.

→ **Anticipate trends towards centralization.**

By their very nature, SWAPs, including pooling arrangements, tend to increase centralization, which runs contrary to efforts designed to decentralize the state. It is essential to anticipate, and counter, this tendency through participative and decentralized bottom-up planning, which then feeds into central planning.

→ **Focus on realistic expectations and time frames.**

Success for the health SWAP depends on the creation of local capacities, which requires patience and sensitivity. As such, local capacity-building should not be put at stake by overly demanding expectations and excessively diverse pressures by the donor community. While donor agencies have a vested interest in keeping funds flowing and proving the success of their involvement to audiences at home, unrealistic expectations and overly ambitious time frames may jeopardize the success of the entire SWAP endeavour.

4. CONCLUSION

Today, the SWAP approach has become a standard in modern development cooperation. It encompasses major tools and principles essential for the success of reform efforts such as local ownership, donor coordination and harmonization of instruments. In addition, the SWAP approach corresponds to the principles set out in the 2005 OECD Paris Declaration on Aid Effectiveness. In Mozambique, state financing had increased dramatically by 2000, thereby reducing the leverage for donors to push for improvements in institutional management. Nevertheless, an increasing number of donors opted for simultaneously maintaining and consolidating the achievements of the 1990s, whilst also embarking on a comprehensive funding mechanism in terms of a fully-fledged SWAP. This reflects the growing realization by donors across several sectors and countries that a pure drawing board approach has its limitations.

While not a panacea, a SWAP approach to health can contribute significantly to effective reform and its application should be seriously considered, depending on the context and capacities of the partner country. The incremental approach, as presented in this article, offers a viable alternative, which is particularly appropriate for states with very weak institutional and management capacities.

LARGE-SCALE MALARIA CONTROL SAVES MANY LIVES IN TANZANIA

Professor Dr Christian Lengeler

INTRODUCTION

Malaria continues to kill one child every 30 seconds and seriously hampers economic development in endemic areas (RBM, 2005). While this disease was brought under control in many areas of the world, including Europe and Switzerland, it remains a serious public health issue in the poorest countries. Large-scale vector control offers a highly effective method of preventing malaria. The new generation of long-lasting insecticide-treated nets (ITNs) offer up to five years of protection at a cost of US\$ 5, and therefore provide a robust tool for achieving lasting reductions in the transmission of the disease. In 2008, the UN secretary-general set a goal of 80 per cent ITN use by 2010 for those affected by the disease. This commitment at the highest level reflects the importance of malaria control and ITNs in achieving Millennium Development Goals 1, 4, 5 and 6.

Long before setting this ambitious goal, the positive health impact of ITNs had to be demonstrated on a scale sufficiently large so as to convince political authorities. In 1996, the Swiss Tropical Institute (STI), with support from the Swiss Agency for Development and Cooperation (SDC) and in the context of its long-standing collaboration with the Ifakara Health Institute (IHI), initiated the first large-scale ITN programme in two remote districts in south-central Tanzania.

The Kilombero Net Project (KINET) implemented social marketing that relied, firstly, on an intense behaviour change communication programme and, secondly, on a dense network of commercial retailers³². KINET was

implemented in this rural population of 500,000 people at a time when protection by ITNs was virtually non-existent in the rest of Africa. A comprehensive evaluation and monitoring system was put in place, so that both programme processes and health impact could be documented. Finally, a voucher system to provide cheaper nets to pregnant women was piloted³¹.

A total of 65,000 nets and 25,000 treatments were sold by the project up to June 2000 and many useful operational lessons were learnt³². By then, about 42 per cent of the children were using a treated net. A repeat survey in 2006 showed that the percentage of the total population that was protected had increased to well over 90 per cent, demonstrating the lasting effect of KINET.

The regular use of an ITN was associated with a 27 per cent reduction in child mortality and a 60 per cent decrease in childhood anaemia – an enormously beneficial impact³³. A positive impact of ITN use was also shown for pregnant women. This evidence was strong enough to convince Tanzania's Ministry of Health and Social Welfare to commission the development of a national ITN policy. These figures also had a major impact at an international level, and KINET was presented as one of only two malaria case studies at the UN Special Summit on Children in New York in May 2002.

The national Tanzanian ITN policy was drafted in 2000 with major inputs from UNICEF and STI staff, after consultation with numerous stakeholders. The policy was approved by directors from the Ministry of Health and Social Welfare in December of the same year, and it led to the creation of the national ITN programme in Tanzania (NATNETS).

In the following sections, we will review the setting up, running and achievements of NATNETS. We will also look at stakeholder processes, including major discussions about strategies that took place in 2007. Finally, Switzerland's central role in this initiative will be highlighted.

31 Mushi, A., Armstrong-Schellenberg, J.R.M., Mponda, H. and Lengeler, C. 'Targeted subsidy for malaria control with treated nets using a discount voucher system in Tanzania' in *Health Policy and Planning*, 18(2): 163–171, 2003.

32 Armstrong Schellenberg, J. R. M., Abdulla, S., Minja, H., Nathan, R., Mukasa, O., Marchant, T., Mponda, H., Kikumbih, N., Lyimo, E., Manchester, T., Tanner, M. and Lengeler, C. 'KINET: a social marketing programme of treated nets and net treatment for malaria control in Tanzania, with evaluation of child health and long-term survival' in *The Transactions of the Royal Society of Tropical Medicine & Hygiene*, 93(3): 225–231, 1999.

33 Armstrong Schellenberg, J.R., Abdulla, S., Nathan, R., Mukasa, O., Marchant, T.J., Kikumbih, N., Mushi, A.K., Mponda, H., Minja, H., Mshinda, H., Tanner, M. and Lengeler, C. 'Effect of large-scale social marketing of insecticide-treated nets on child survival in rural Tanzania' in *The Lancet*, 357(9264): 1241–7, 2001.

1. AIMS

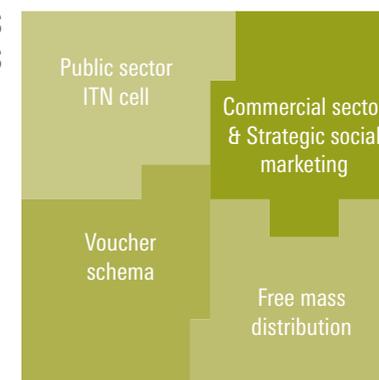
NATNETS was designed and implemented as a major malaria control initiative by many ITN stakeholders, under the leadership of the Ministry of Health and Social Welfare. NATNETS aims to provide universal protection for the whole population (85 per cent coverage) by 2012³⁴, and thereby to significantly improve the health of all Tanzanians – especially children.

The aim of the Swiss contribution to NATNETS was to support the scaling up of ITNs by providing a core of dedicated health professionals as well as broad technical support. This was done through the creation of an ITN cell within the National Malaria Control Programme (NMCP), as part of the NETCELL project implemented by the Swiss Tropical Institute and supported financially by SDC. Since 2002, the ITN cell has played the role of driver and coordinator of all ITN activities in the country.

2. PROGRAMME DESCRIPTION

From its inception in 2000, NATNETS was based on a multi-stakeholder public–private partnership (PPP). Apart from the relevant government programmes, other important participants included researchers, non-governmental organizations (NGOs), net manufacturers and commercial agents. Multiple donors support the programme. NATNETS is essentially composed of the following four key components, which are closely linked.

THE FOUR KEY COMPONENTS
OF NATNETS



34 National Malaria Control Programme (NMCP). Mid-Term Strategic Plan 2008–2012. Ministry of Health and Social Welfare, Dar es Salaam, 2007.

(1) A national ITN cell within the National Malaria Control Programme, which is responsible for all matters relating to ITNs on behalf of the Tanzanian government. This role involves coordination of stakeholders and programme components, oversight of contractors, and funding acquisition. It also involves taking care of issues such as regulatory aspects, standards and consumer protection, and keeping taxes and tariffs on ITNs and related products low. The ITN cell is run by STI and NMCP staff, with financial support provided by SDC. The link with the Swiss Tropical Institute has ensured adequate staffing, strong technical support, as well as continuous networking at a regional, continental and global level.

(2) The Tanzania National Voucher Scheme (TNVS) aims to provide every pregnant woman and every infant coming for measles vaccination with a voucher worth 3,250 Tanzanian shillings (TZS, approximately US\$ 2.50), which can be redeemed against an ITN at a participating retailer. Women/mothers have to pay a top-up contribution, which in 2008 averaged one US dollar.

The voucher system was designed and piloted during the KINET phase. Pregnant women and, in particular, infants are the groups most at risk of malaria morbidity and mortality³⁵. Since pregnant women are closely associated with babies during the first year of life, protecting them represents an obvious way of protecting the baby as well. The main considerations in choosing this system over the distribution of free ITNs were the following:

- ITNs distributed directly through the public sector clinics could easily overload the system. Public clinics often find it difficult to supply even basic drugs. Getting them to distribute bulky goods such as ITNs on a regular basis would pose a formidable logistical challenge.
- ITNs are a valuable commodity, and keeping track of stock and avoiding misuse would prove very difficult.
- The use of vouchers creates a predictable demand for ITNs in even the most remote corners of the country, thereby stimulating the commercial ITN market. The latter can then efficiently and sustain-

ably supply ITNs to the rest of the population. Vouchers also have two important additional functions: strengthening the role of public health services (by making mother and child health services more attractive) and providing a focus for health promotion on malaria.

All TNVS activities are subcontracted to implementing partners such as the Mennonite Economic Development Associates (MEDA) for the logistics, and CARE and World Vision for training and promotion. A consortium comprising the Ifakara Health Institute and the London School of Hygiene and Tropical Medicine is responsible for all monitoring and evaluation activities. Funding is provided by The Global Fund to Fight AIDS, Tuberculosis and Malaria, as well as by the US President's Malaria Initiative (PMI).

(3) A major social marketing component, which ran from 2000 to 2007, by Population Services International (PSI) under the name SMARTNET. This national programme had intensive demand creation and behaviour change communication components. SMARTNET was also responsible for developing and strengthening the network of ITN wholesalers and retailers in the country. In doing so, it created a necessary condition for the national voucher system to operate – since pregnant women had to be able to purchase an ITN near their homes – which in turn helped create a sustainable and predictable market for the commercial distribution system (an elegant win-win situation). The work was supported by the UK's Department for International Development (DFID) and the Dutch embassy. The demand creation and behaviour change components are currently led by the COMMIT programme, implemented by a consortium headed by the Johns Hopkins Bloomberg School of Public Health – with support from the President's Malaria Initiative – and another programme led by PSI with support from the Global Fund.

(4) A universal mass distribution of free long-lasting ITNs aimed at every citizen (a 'catch-up' campaign). This effort will be initiated in 2009 and completed in 2010 as collaboration between the government of Tanzania and the main contractor, MEDA.

35 Roll Back Malaria (RBM). Scaling-up Insecticide-treated Netting Programmes in Africa: A Strategic Framework for Coordinated National Action. Geneva: Roll Back Malaria, 2005. Available at www.rollbackmalaria.org/partnership/wg/wg_itn/docs/WINITN_StrategicFramework.pdf

Financial support is provided by The Global Fund to Fight AIDS, Tuberculosis and Malaria, PMI and the World Bank Booster Program for Malaria Control in Africa. Providing access to an ITN for every citizen will bring massive health and socio-economic benefits to the country. Distributing 20 million ITNs does, however, represent a major logistical feat, while the total investment in ITNs for the period 2007–2011 amounts to over US\$ 200 million, which, while a large amount, represents just US\$ 1 per person per year.

A comprehensive description of NATNETS is available in Heierli and Lengeler³⁶.

3. RESULTS

Commercial ITN sales in Tanzania have increased steadily, reaching nearly 3 million units per year in 2008. Over 6,400 retail outlets are now selling ITNs – more than one outlet for every two villages. Access to ITNs is therefore now universal. More importantly, a true culture of bednet use has now been introduced into the country.

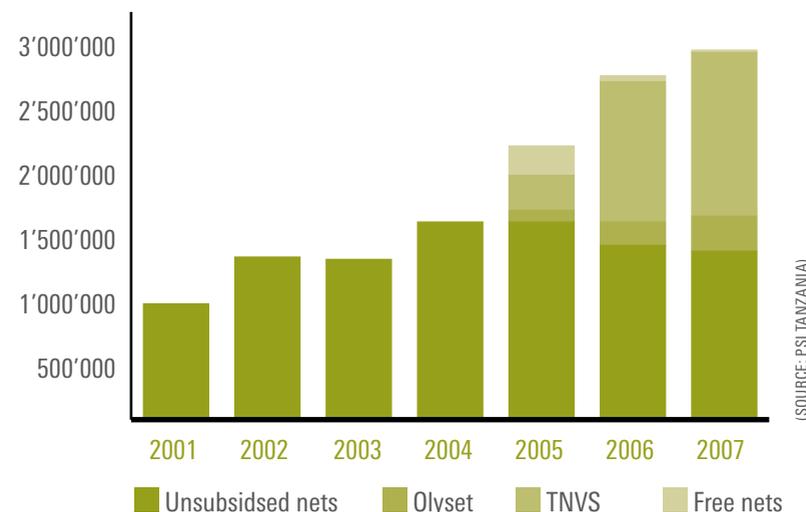
The proportion of these nets bought with a voucher has also increased steadily, and currently stands at 43 per cent. Operationally, the TNVS has been running well, with the majority of health facilities stocking vouchers and delivering them in routine services – a notable achievement in this very large country.

On the other hand, net usage rates among both pregnant women and infants have remained well below the target of 80 per cent. In 2007, 39 per cent of pregnant women used any sort of net, while only 23 per cent were regularly using an ITN. For infants, the results were slightly higher: 56 per cent for any type of net and 34 per cent for an ITN³⁷. Clearly, the TNVS worked well but greater efforts were needed to improve usage rates.

36 Heierli, U. and Lengeler, C. Should bednets be sold, or given free? The role of the private sector in malaria control. Swiss Agency for Development and Cooperation and Swiss Tropical Institute, 2008. Available at www.poverty.ch/malaria-bednets.html

37 Hanson, K., Marchant, T., Nathan, R., Mponda, H., Jones, C., Bruce, J., Mshinda, H. and Armstrong-Schellenberg, J. 'A national voucher programme for insecticide treated nets in Tanzania: Effects on household ownership and use among target groups after three years of implementation'. British Medical Journal, in press.

ANNUAL SALES OF ITNS IN TANZANIA , 2001–2007



This situation prompted an in-depth discussion among stakeholders on the best course for the future, with the aim of rapidly increasing ITN coverage (a so-called catch-up strategy) while, at the same time, ensuring sustained protection (a keep-up strategy). This vigorous debate expanded at times into a global discussion on the best way forward^{38,39}.

The result of this important discussion was a plan to proceed with a mass campaign of free nets (catch up), while maintaining the national voucher programme as a keep-up strategy. This forthcoming mass distribution of free, long-lasting ITNs in 2009–2010 will also go a long way towards addressing the issue of inequity in access.

Despite shortcomings in coverage, the development of malaria control activities in Tanzania has brought about remarkable improvements in child survival indicators. From 1999 to 2008, overall child mortality (under five years) decreased by 38 per cent, from 147 to 91 per 1,000 – equivalent to 80,000 averted deaths. While the drop also has other causes, up to half the reduction may credibly be attributed to malaria interventions. This represents over 40,000 child deaths averted every year. Furthermore, there is ample anecdotal evidence to suggest that patient attendance for episodes of fever is decreasing in health facilities – on average 10 per cent per year

38 Roberts, L. 'Combating malaria: Battling Over Bed Nets' in Science, 318, 556–559, 26 October 2007.

39 Lengeler C., Grabowsky, M., McGuire, D., and deSavigny, D. 'Quick wins versus sustainability: options for the upscaling of insecticide-treated nets' in The American Journal of Tropical Medicine and Hygiene 77(Suppl. 6), 222–226, 2007.

in the Ifakara area, for example – and that the national malaria prevalence rate now stands at only 18 per cent compared with double that level 10 years ago (National HIV Indicators Survey 2008).

Finally, a remarkable feature of NATNETS is the fact that it has enabled a highly successful ITN industry to develop. Tanzania was the first country in Africa to abolish tax on netting in order to ensure low prices and facilitate access. This forward-thinking measure, coupled with strong stimulation of the commercial sector, contributed to the successful expansion of the mosquito net industry. Currently, four mosquito net factories are producing more than 20 million nets a year – enough to supply the local market and to create a thriving export industry worth over US\$ 100 million and 10,000 jobs.

4. CONTRIBUTION BY SWITZERLAND AND CONCLUSION

Switzerland and, more specifically, the productive partnership between the Swiss Tropical Institute and the Swiss Agency for Development and Cooperation, has played a critical role in the design, implementation, financing and coordination of the NATNETS programme. For a total investment of just 5 million Swiss francs, the ITN cell has generated a total programme volume of over 200 million dollars – a remarkable leverage effect. NATNETS has, without doubt, significantly improved the health of all Tanzanians.

The programmatic success of NATNETS is matched by other Swiss successes in the area of malaria control. STI played an important part in the development of a new and promising malaria vaccine (RTS, S), and in the validation of the Intermittent Preventive Treatment for Infants (IPTi) strategy. Equally successful are Novartis Pharma, the world leader in modern antimalarials, and Syngenta, one of the world's leading insecticide and vector control product specialists.

NATNETS has also provided a good example of a working multi-stakeholder PPP. It illustrates how Switzerland can play a significant role in an important global health initiative and use its know-how to generate and support innovative and important processes. It also amply demonstrates that while the resources that can be generated in Switzerland for

global health are very limited, the leverage of global resources within the context of multilateral initiatives has the potential to multiply the impact of Swiss investments.

INTERNATIONAL CENTRE FOR DIARRHOEAL RESEARCH, BANGLADESH: ACTING LOCALLY, DISSEMINATING GLOBALLY

Jacques Martin

INTRODUCTION AND HISTORICAL BACKGROUND

Cholera had reappeared in Thailand in 1958 and spread rapidly through the country, threatening several of the Southeast Asia Treaty Organization (SEATO) member countries. A US-led technical commission found Pakistan, where cholera is endemic, more suitable for long-term studies and recommended basing the laboratory in East Pakistan (now Bangladesh). In 1960, Dr Fred Soper, a renowned US doctor of medicine and scientist⁴⁰, was asked to establish the Pakistan-SEATO Cholera Research Laboratory in Dhaka, which he directed until 1962.

*The centre carried out intensive research on cholera. Following the creation of Bangladesh in 1972, the centre was renamed **International Centre for Diarrhoeal Disease Research, Bangladesh**. It has since been known as ICDDR,B but is often referred to as a health and population research centre in view of its demographic research activities, which have been carried out since 1963 as part of its rural health programme in Matlab. In 2006, taking its diversification into account, the centre relabelled itself 'icddr,b: knowledge for global lifesaving solutions'.*

This article aims to show that this independent, international centre, outside the UN family, strongly rooted in Bangladesh and equipped with a large-scale hospital serving the local population, plays a regional, as well as an increasingly global, role in research into water-borne cholera disease and related nutritional and child survival issues. ICDDR,B is an excellent

40 Dr Fred Soper (1893–1977), Dr PH, MPH, closely associated with the Rockefeller Foundation, was also director of the Pan American Sanitary Bureau (PASB), the executive agency of the Pan American Sanitary Organization (formerly the Pan American Health Organization). He was an infectious disease consultant to the US Secretary of War during the Second World War, and was later a founder member of the Rockefeller Foundation's International Health Board.

example of people-oriented applied research supported by solid scientific, medical, environmental and social research.

The centre helps solve other alarming health problems faced by people in the region – such as arsenic poisoning – and has been supported by a group of faithful donors, including Switzerland. In 2001, it was awarded the first-ever Gates Award for Global Health.

1. AN EVOLUTION TOWARDS A HEALTH RESEARCH INSTITUTION OF GLOBAL SIGNIFICANCE

The centre is an independent, international, non-profit organization for research, education, training and clinical service; it also conducts findings dissemination activities as well as programme-based activities. Its mission is to develop and disseminate solutions to major health and population problems facing the world, with an emphasis on simple and cost-effective methods of prevention and management. ICDDR,B works in collaboration with partners from academic and research institutions throughout the world.

Health research for the poor gained in importance in the early 1990s. The role of those who pioneered research in this domain was recognized by the World Bank, when advocating for larger-scale efforts in 1993.

Increased scientific knowledge has accounted for much of the dramatic improvement in health... by providing information that forms the basis of household and government action and by underpinning the development of preventative, curative and diagnostic technologies. Because the fruits of science benefit all countries, internationally collaborative efforts, of which there are several excellent examples, will often be the right way to proceed⁴¹.

As further developments since 2000 have shown, with the scaling-up of programmes from 2000 onwards (Global Fund, GAVI, Stop-TB, UNITAID, etc.), knowledge and science are necessary to create the conditions for

efficiency and attract donors, including new ones such as the private sector. ICDDR,B played a crucial role in this respect.

ICDDR,B is the research institution that scientifically confirmed the importance of, and further developed, the oral rehydration solution (ORS) to combat the deadly side effects of cholera. It has, over the years, expanded its activities: starting with specific research on cholera, including the environmental dimension of the transmission process, the centre, while adopting a holistic approach to health, gradually developed its research into important related issues, addressing the causes and consequences of diarrhoeal diseases in children and related nutritional issues, as well as associated mother and child health issues, including vaccination. The centre has provided evidence that a common thread links infectious diseases in children – such as acute respiratory tract infections or EPI (Expanded Programme on Immunization) preventable diseases (measles, tuberculosis, tetanus, diphtheria, polio and whooping cough) – with the nutrition of the mother and of the child. Low birth weight and malnutrition predispose children to disease, and diseases often result in a worse nutritional status leading to a vicious cycle of cause and effect.

In addition, an unprecedented health and demographic activity also became a key feature of the centre, with a unique long-term, multigenerational health and demographic surveillance system (DSS) carried out in the Matlab rural area, including an unparalleled maternal and child health / family planning (MCH-FP) record keeping system. The result of these studies represents the longest series of demographic and sexual and reproductive health data available anywhere in the developing world.

In the mid-1990s, the centre began contributing to the analysis and design of solutions for the arsenic poisoning crisis in Bangladesh, which continues to affect millions of people in the region⁴², as well as to fight HIV/AIDS – a delicate endeavour in this socially and culturally conservative country, where the centre's solid scientific reputation helped make research, findings and solutions more acceptable.

Equipped with an outstanding fully operational hospital in Dhaka – complemented by a smaller one in Matlab – and with probably the best state-of-the-art microbiology laboratory in the developing world, ICDDR,B has become a centre of excellence. As a result, the centre has, over the

⁴² Besides Bangladesh, Cambodia, India, Myanmar and Vietnam are also affected. More than 140 million people in Southern / South-Eastern Asia drink groundwater contaminated with arsenic. Thousands of people in these countries die of cancer every year from chronic exposure to arsenic, according to WHO.

decades, attracted scientists from all over the world – a relatively unique situation for a research institution based in a least developed country. Many researchers originating from the best universities in industrialized countries conducted all or part of their PhD research in or around the centre, to the full benefit of this multidisciplinary research centre.

One of the particularities of the centre is that it is simultaneously an international and a national organization, according to the ordinance signed by the Bangladeshi government in 1978 establishing ICDDR,B. The national dimension has historical roots, but is also explained by the fact that the centre hosts the aforementioned hospital serving the Greater Dhaka area, with a record attendance of more than 100,000 patients per year.

2. HELPING, WITH PARTNERS, TO PLACE HEALTH ON THE DEVELOPMENT AGENDA

While the Pakistan-SEATO Cholera Research Laboratory was a donor-driven project, with dual aims – serving the local population but also indirectly serving US defence objectives abroad – ICDDR,B now is a fully independent scientific institution considered by the global health community as a major actor and partner. The centre does not only work in collaboration with others from academic and research institutions; it also receives mandates from major institutions and donors to carry out specific research.

It has become the scientific arm of many health, and health environment, people-oriented programmes, such as the Mainstreaming Nutrition Initiative funded by the World Bank to tackle the common problem of low birth weight in the region. Also worthy of mention, is the research into zinc deficiency and the pneumonia and meningitis vaccine trial carried out in Bangladesh as a result of the high morbidity rate in children. In addition, the centre has participated in a major regional mobilization over the last 15 years to address the issue of arsenic poisoning. There is also an HIV/AIDS programme, with its important social wing aimed at injecting drug users (IDUs), some of whom live in areas covered by the ICDDR,B-led urban community-based health services programme⁴³.

The centre has also produced scientific evidence, informed by its numerous field activities in health and demography, thereby helping to strengthen health and family planning systems. In addition, research outcomes have provided useful scientific evidence of the link between poverty and ill health, helping to demonstrate the importance of health equity in a country where nearly half the population lives below the poverty line.

ICDDR,B is, without doubt, a major actor, having helped place health high on the development and political agendas. In so doing, the centre has helped answer a question that arises when donor fatigue is at play, or when simplistic solutions seem to be preferred for political reasons: “When the poor need food, who needs research?” Much of the positive social and economic development, as measured by the HDI⁴⁴, would not have happened in developing countries without the evidence produced by health and social research, such as that carried out at the centre.

PARTNERSHIP

Although very much a US-supported institution at its inception and over the years, ICDDR,B benefited, soon after the creation of Bangladesh, from additional important sources of bilateral support, from the United Kingdom, Japan, the Netherlands, Sweden and Switzerland to mention a few. Multilateral support, not just financial, was also provided by WHO, UNICEF and the World Bank. These partners continued to support the centre over the decades and have all been instrumental in its governance and helped it to be a part of a wider network.

In addition, private foundations and the private sector have offered and continue to offer financial support as well as visibility. Long before it became a trend, the centre – free from intergovernmental politics, even if mostly supported by taxpayers’ money – has extended its network way beyond the traditional donors and has benefited from these contacts.

The heart of the donor community was well represented in the governance of the centre, often with long-term participation in its 16-member board of trustees. Most bilateral donors support the core budget, but some prefer to earmark all or most of their contributions to finance specific programme activities. In the mid-1990s, the share of core funding became so insubstantial, around 20 per cent, that the centre’s budget and the independence of the management were at stake, particularly given the

⁴³ A recent ICDDR,B–UNODC partnership ensued, whereby ICDDR,B is undertaking a pilot study on oral substitution treatment with methadone, approved Bangladeshi government in August 2008. The study aims to demonstrate the feasibility and efficiency of harm reduction services.

⁴⁴ HDI – Human Development Index, one of the four main Human Development Indices developed by the Human Development Report. See <http://hdr.undp.org/en/humandev/hdi>

heavy burden imposed by the hospital and centre infrastructure. Since then, the situation has improved. At the same time, the centre has seen extra-budgetary funding increase, including from mandates.

This stable group of donors may give the false impression of immobility. However, the centre continues to receive a wide range of support from various partners. USAID limits its contribution to less than 50 per cent and does not systematically participate on the board. The centre's executive director from 1999 to 2007 was a US citizen, Dr David A. Sack, but his predecessor was a renowned African scientist, Dr Demissie Habte, whose eight-year tenure ended in September 1997⁴⁵. The current executive director is Dr Alejandro Cravioto, a Mexican national with a distinguished scientific career in public health. The merit of this internationally supported entity is in its ability to attract scientists from all over the world and thus avoid the urge to appoint staff to reflect funding sources.

The same community of donors has remained supportive of the centre over the decades, fully aware of ICDDR,B's potential to help advance science in its areas of competence. The centre's ongoing evolution and its capacity to adjust to a changing world have helped attract new donors and programme research contracts.

The centre has always been considered the pride of Bangladesh, along with the other two other institutions (BRAC and Grameen Bank) which are world-famous in their respective fields. The Bangladeshi government has been particularly supportive of the centre, but not just because of its large hospital in Dhaka. In a city of some 12 million inhabitants, this infrastructure is most welcome. During floods and cholera outbreaks – the latter often being the consequence of the former – it serves more than 600 patients per day (and up to 120,000 patients per year).

However, the centre has not been without its problems; in the second half of the 1990s, it underwent a crucial restructuring. It shed approximately 200 staff out of a total of around 1,500, while new internal procedures for priority-setting and internal financial cost recovery were adopted. The director general of the Swiss Agency for Development and Cooperation (SDC) had decided to support the process, financially and through the secondment of consultants who worked as facilitators. Some donors, who had earlier expressed concerns, acknowledged the positive outcome of

the process and decided to continue or even increase their support to the centre. It would probably not have received the Gates Award for Global Health in 2001, for its pioneering discovery and development of an oral rehydration solution, had this successful reorganization not taken place.

3. OUTCOME AND OTHER ACHIEVEMENTS

The centre's achievements include:

- Early research on the development of oral rehydration glucose saline solution and clinical trials demonstrating its efficacy. This has since been adopted by UNICEF, disseminated worldwide and used by all rehydration programmes. Further research has demonstrated the advantages of cereal-based rehydration fluids.
- Understanding the interrelationship between malnutrition, feeding practices, infection and the pathogenesis of diarrhoea, resulting in the recognition and practice of continued feeding during acute and persistent episodes of diarrhoea.
- Contributing to the introduction of cost-effective strategies for zinc therapy in diarrhoea.
- Demonstrating the limitations of the injectable cholera vaccine in the control of epidemics and the prevention of transmission. As a result, the use of the old injectable cholera vaccines has been actively discouraged by international health agencies, including WHO. This led to a complete change in the health practices of most countries, with annual savings of millions of dollars. Nevertheless, research continues at the centre to identify safe and effective vaccines against cholera and other diarrhoeal diseases.
- Identifying a new strain of cholera. The related basic laboratory, epidemiological and clinical research was carried out and completed in a matter of months after its emergence in Bangladesh.
- Demonstrating that improved community sanitation not only affects the prevalence of diarrhoea, but also protects against some forms of malnutrition, thus giving added impetus to community education efforts.
- Demonstrating that high doses of vitamin A given to infants during the first six months of life cause transient side effects. This re-

⁴⁵ Professor Dr Demissie Habte later worked for the World Bank. He was also asked to help conceive and launch, as international director, the James P. Grant School of Public Health (BRAC University) in Dhaka. In 2005, Dr Habte was made an honorary fellow of the London School of Tropical Hygiene & Medicine.

search, conducted at the request of international health agencies, prompted UNICEF to fine-tune its policy of administering vitamin A through EPI⁴⁶.

- Demonstrating that moderately educated, rural-based, female family planning workers, when carefully trained and given a range of contraceptives to offer at the household level and provided with adequate back-up, support and supervision, can dramatically increase the use of contraceptives in hitherto underserved areas. These lessons have been transferred to the Bangladeshi government for replication countrywide, and are also being used throughout the world.
- Scientifically demonstrating that exclusive breastfeeding by mothers of children aged below four to six months should be encouraged as a measure that could reduce infant mortality by as much as 20 to 30 per cent.
- Developing prevention and treatment programmes against the HIV/AIDS epidemic, as well as reproductive tract and sexually transmitted infections.
- Training thousands of healthcare professionals now operating in field sites in each of the five continents.

In addition to the above, years of experience and meticulous record-keeping have provided ICDDR,B with an incomparable wealth of information, data and samples:

- Surveillance systems for clinical, epidemiological, health system and demographic research provide invaluable information for health and family planning programmes throughout the world. They helped find effective ways of delivering existing, proven, low-cost health and family planning technologies to the rural and urban poor, saving as many lives as a new vaccine or drug.
- Several major dissemination programmes in the fight against cholera, and in the areas of immunization, nutrition, sexual and reproductive health, have benefited from these research outcomes. Not only did the population benefit, but the programme themselves became more efficient and reduced costs while avoiding unnecessary or inappropriate expenditure.

While the centre conducts most of its research in Bengal and South Asia, from where it draws most of its competence, its outcomes are applied worldwide. Teams from ICDDR,B sometimes travel to other continents to coach local researchers or train health professionals. The centre also attends scientific gatherings where it presents its research.

The gradual broadening of the scope of the centre did not lead to a loss in focus. ICDDR,B's core business remains clear and concentrated on the diseases and deficiencies resulting from poverty, and the search for affordable solutions to address them.

The governance of the centre is also an achievement worth mentioning. The board of trustees has always been an interesting mix of scientific competence and international partnership. The board of trustees is the governing institution, as ICDDR,B neither depends directly upon another organization nor is placed under the shelter of an umbrella organization. During the restructuring, which lasted nearly two years between 1997 and 1999, the chair of the board of trustees was the only board member who was neither a scientist nor a doctor of medicine⁴⁷. In contrast, most of the board's work during these hectic times centred on managerial and governance issues, including good governance and executive leadership.

⁴⁷ The author of this paper – a board member from 1995 to 2000 and chairperson from mid-1997 to mid-2000.

NB: Swiss have sat on the board on several occasions: in the 1980s, Dr Immita Cornaz of SDC; from 1995 to 2000, Jacques Martin, who was replaced by Professor Marcel Tanner, director of the Swiss Tropical Institute, for a period of six years. The current Swiss board member is Dr Nick Lorenz.

4. SWITZERLAND'S CONTRIBUTION

The excellence of the work carried out at the centre and its real impact on the health of millions of people justifies Switzerland's steady support for the centre from 1978 onwards, as well as the scale of its overall contributions, in the order of 40 million Swiss francs. Why did Switzerland join and support ICDDR,B to begin with?

The answer is probably that the centre was doing very concretely what the Swiss Agency for Development and Cooperation had identified as priorities in health:

- maternal and child health, a key component of the early health policy at SDC, which later developed into child health and child survival on the one hand, and sexual and reproductive health on the other
- dissemination of evidence-based solutions for the health of the poor
- activities carried out in a developing country with a majority of scientists from developing countries, thus enabling ownership for these countries
- basing the centre in poverty-stricken Bangladesh

Complementarities were at play, as SDC was also supporting the WHO diarrhoeal disease programme, as well as several other multilateral endeavours aimed at improving maternal and child health – such as immunization and ARI⁴⁸ programmes – under the aegis of WHO and of UNICEF. SDC was, and still is, a strong supporter of UNICEF and was convinced that some necessary upstream scientific work to benefit children could be carried out by a centre such as ICDDR,B.

Over the years, the Swiss contribution – essentially a core contribution – to the centre used to represent 10 per cent at most, and around 5 per cent at least, of the total budget. This has made this country a faithful and appreciated partner of the centre. In recent years, Switzerland's relative share decreased somewhat. With this downward trend in mind, Switzerland was the first donor – and remained among the very few – to contribute to the newly created Hospital Endowment Fund and Centre Endowment Fund, offering added sustainability to ICDDR,B, respectively 3 million Swiss francs in 1995 and 1.5 million Swiss francs in 1998.

This modern approach also took advantage of the prevailing positive macroeconomic conditions, a period of nearly ten years during which such funds could be invested locally in the stock market at little risk and with a high yield. The centre later selected more conservative and defensive investments for its endowment funds.

SDC's institutional support has been considered a bilateral contribution for a good 20 years. From 2000 onwards, the agency has turned it into a multilateral contribution in view of the centre's global significance. The role of 'small donor' alongside the US was well accepted, particularly as smaller donors were contributing approximately 40 per cent of the centre's total budget. The spirit of cooperation among donors has been excellent.

The successful restructuring in the late 1990s, mentioned earlier, was carried out with the full support of the US board member and of USAID, who were happy to share the lead in the process.

5. CONCLUSION

ICDDR,B is acting locally but thinking far beyond the borders of Bangladesh. The impact of the research conducted in the country by this international health centre is definitely global. The role of the centre as a provider of outcomes – outcomes that are of use to global programmes implemented by major organizations such as UNICEF, WHO and GAVI – is unique and is the result of the quality of the science and its field orientation. The most recent developments at the centre also demonstrate a capacity to adjust to a changing world in terms of both content and ways of doing business⁴⁹.

ABOUT THE AUTHORS

PHARMACEUTICAL POLICIES

Dr Pascale Brudon is currently member of the Global Board of Health Action International (HAI). She worked at the World Health Organization from 1984 to 2006. Her main posts over the years have included representative of the WHO country office in Vietnam and senior scientist in charge of developing national pharmaceutical policies in a number of countries in Africa and Asia. She is the author of several publications on public health and pharmaceuticals.

Dr Immita Cornaz, Dr ès sc. soc., Dr honoris causa, was member of the Swiss Agency for Development and Cooperation (SDC) for nearly 30 years, for 10 years of which she was head of social affairs, directly in charge of health. In this capacity, she was also a member of the Swiss delegation to the World Health Assembly (WHA), to the Alma-Ata conference on primary healthcare, and to the Nairobi Conference on the rational use of drugs. She has also been chairing WHO programmes, such as TDR, DDC and DAP. In addition, she sat on the board of trustees of ICDDR,B and served as its chairman.

THE GLOBAL FORUM FOR HEALTH RESEARCH

Louis J. Currat holds a Master's degree in Economics from the University of Michigan and an MBA from the University of Geneva. Between 1997 and 2003, he was the first executive secretary of The Global Forum for Health Research in Geneva. He previously worked as director of the technical department of the Swiss Agency for Development and Cooperation in Bern, and as an economist at the World Bank in Washington DC.

SUPPORTING NATIONAL RESEARCH FOR HEALTH (COHRED)

Dr Martine Berger is a medical doctor (PhD from the University of Lyon, France; Master of Public Health (MPH) from Harvard University, USA), specializing in tropical medicine and international public health. She is currently senior adviser at COHRED. She worked at the Swiss Agency for Development and Cooperation for ten years, including five years as special adviser on public health at the Swiss mission to the United Nations. She worked during two years for the 4th external review of the Special Programme for Research and Training in Tropical Diseases (TDR), and has almost 25 years of experience in humanitarian aid, development, health and health research policy.

Dr Daniel Mäusezahl is an epidemiologist (MSc/biology and PhD Sc. from Basel University) holding a Master of Public Health (MPH) from Berkeley, USA. He is presently a senior scientist at the Swiss Tropical Institute and was formerly a senior health adviser at the Swiss Agency for Development and Cooperation. For the past 20 years, he has been working in public and international health and as an environmental health epidemiologist. Since 2001, he has been engaged in health policy negotiations and the global health research policy debate for the Swiss government.

APPLYING A SECTOR-WIDE APPROACH TO THE HEALTH SECTOR IN MOZAMBIQUE

Ambassador Thomas Greminger has headed, since 2004, the Swiss Federal Department of Foreign Affairs' main competence centre for peace and human rights, as well as for humanitarian and migration policy (Political Affairs Division IV). He joined the Swiss diplomatic service in 1990 and began his career as an attaché at the Swiss embassy in Tel Aviv. In 1992, he became diplomatic adviser for development policy at the Swiss Agency for Development and Cooperation and, in 1996, was promoted head of its development policy and research division. From 1999 to 2001, he was Swiss chargé d'affaires in Maputo and country director of Switzerland's development cooperation programme in Mozambique. From 2002 to 2004, he served as deputy head of Political Division IV of the Swiss Federal Department of Foreign Affairs and chief of the peace policy section.

LARGE-SCALE MALARIA CONTROL IN TANZANIA

Professor Dr Christian Lengeler is a professor of epidemiology at the University of Basel and a senior scientist at the Swiss Tropical Institute. He has been working for the past 20 years on the epidemiology and control of tropical diseases, with a main focus on malaria. Since 1996, he has been involved in the establishment and running of the national ITN programme in Tanzania.

INTERNATIONAL CENTRE FOR DIARRHOEAL RESEARCH, BANGLADESH

Jacques Martin is a political scientist and long-time development practitioner. From 1991 to 2000, he headed the human resources technical division of the Swiss Agency for Development and Cooperation. He was also a member of the board of trustees of the International Centre for Diarrhoeal Research, Bangladesh (ICDDR,B) from 1995 to 2000, serving as chairperson for the last three years. He later spent four years as diplomatic counsellor (health and development) at the Swiss mission to the United Nations and other international organizations, until 2008. He is currently senior adviser to the Global Health Programme.

