HEALTH RESEARCH AT IDRC, 2000-2004

CURRENT SITUATION AND A VISION FOR THE FUTURE

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EXECUTIVE SUMMARY

Consultations to date indicate substantial support for new programming in the health area at IDRC, and support for research on governance/service delivery to complement the research currently supported by other PIs, particularly ECOHEALTH. Health is identified as a priority development issue in sub-Saharan Africa. Discussions with programme staff have uniformly suggested that the Centre allocate a budget for health. This budget would ensure coherence among projects, be used to encourage the PIs without health-related projects to include health issues in their programming, and leverage outside funds. Leaving the initiative up to individual PIs is seen as unworkable: "mainstreaming" cross-cutting issues such as health without allocating financial and human resources is both difficult operationally and leads to poor visibility and lack of coherence in programming. The minimal scenario - status quo plus a webpage on which to post occasional synthesis papers - is seen as unsatisfactory; support for visible and substantive contributions to health research is high. Both programme staff and our partners support research-to-policy linkages, but insist on a clear focus on equity –including social, health, economic and gender equity – and community participation as a strategy to meet our mandate of "Empowerment through knowledge", and as a complementary strategy (to that of direct policy links) for influencing public policy. Finally, prospects are good for developing Canadian and international financing partnerships in support of health research over the course of this CSPF.

A vision for health research at IDRC

IDRC plays a leadership role in offering a model for an integrated, intersectoral approach to health research aimed at equitable development, through supporting explicitly "health" research programmes such as Ecohealth and TEHIP, through mainstreaming health into other programming areas, through encouraging health research to include other sectoral perspectives, and through emphasizing research-policy links both directly and through civil society. We provide seed funding and actively seek partners. IDRC continues to address health as a substantive area for examining the themes of current PIs, under the general framework of "Governance, Equity and Health". Within this framework, programming is pursued on two fronts: (1) determinants of health, and (2) interventions to improve health, emphasizing health systems and service delivery understood in both technical and "governance" terms. New programming is concentrated in sub-Saharan Africa. We assist TEHIP in moving to its next phase as a health system model for other countries, a research and development platform and regional Centre of Excellence, under a consortium of donors and partners. HIV/AIDS is addressed through current PIs and health systems research. A new HIPC research programme includes health as a significant focus. Further synthesis work, operationalization of proposed programming, and exploration of alternative funding and capacity building modalities will be explored over the next 6 to 12 months. Synthesis and communication of research results is a key component of our work in health. SSA's role is overall coordination and mainstreaming of health at the Centre, synthesis activities, resource expansion, and liaison with the Canadian and global health research community. Health has increased regional presence in sub-Saharan Africa.

In order to fulfill this vision and following extensive consultation, I am requesting a programme budget of $600,000 annually and an operating budget to support a PO, RO, and PA. The following tables outline expected programme collaboration over 3 years, and estimates of reasonable resource expansion expectations based on discussions with PBDO and various potential partners over the past several months. I envision the following resource allocation split: 25% PI support; 45% new programming in interventions for improving health/service delivery; 20% Canadian and Global initiatives for governance, equity and health; 10% synthesis, dissemination and closing the loop activities (above those normally expected to occur through project funding). The exact proportions will vary over the course of this CSPF and in response to further consultations after a clear mandate to proceed has been received. For the remainder of this fiscal year and early next year, I would continue collaborative exploration with selected PIs of possible specific health-related activities. SUB in particular has expressed interest in strengthening its health portfolio.

In terms of health systems/governance work, the priorities for the current CSPF should be:

I. Examining the implementation of health service delivery and health sector reform policies in terms of their differential impacts on gender and social equity (their effectiveness in reaching the poorest and most deprived populations). This would entail empirical investigations in technical "health" terms and in terms of social participation/citizenship, as well as conceptual work around measurement (quantitative and qualitative) of health and poverty effects and of the intersections among gender and poverty. This area of programming could be pursued through building on TEHIP, MAPHealth, networks such as Equinet, and through maintaining a health focus in the proposed HIPC/Poverty Reduction programming under discussion with CIDA. HIV/AIDS , TB, and malaria could be substantive entrypoints for examining these issues in various settings, thus opening the possibility for collaboration (and cofunding) with CIDA and other agencies seeking to implement G8 commitments.

II. Addressing HIV/AIDS, particularly in Southern Africa, through inviting proposals and supporting networks working on one or more of the following issues: how intersectoral AIDS policies are formulated and integrated into PRSPs, social and livelihood impacts, the intersections of household and community coping strategies with health and other sectors' responses, impacts on the health sector, and pharmaceutical policy and availability. ICTs could play an important role in this research. Again, gender, poverty/inequality and citizenship/social participation should be emphasized in this area. IDRC should in the first instance seek to identify entrypoints from current programming in TEC, ACACIA/SchoolNet and health (Ecohealth and health systems) projects, and to coordinate new activities with CIDA's current and proposed programming in Southern Africa.

III. Contributing to discussions in the regions and globally on global public goods.

Given the external liaison roles of the SSA and the current paucity of health expertise at

the Centre, it will be extremely difficult to offer sufficient technical support to PIs wishing to strengthen their health work without additional resources. This paper demonstrates that many opportunities exist to integrate health issues into current programming, and to strengthen the health systems work that the Centre has continued to support on an ad hoc basis over the past decade. However, mainstreaming (in the sense of health being clearly identified as a multidimensional and cross-cutting issue, and not simply a few health projects being "smuggled" into marginal places in various PIs) has to date been unsuccessful. Instead, many programme staff believe, and have told non-Centre researchers and potential partners, that "there is a sort of peripheral interest in health" and even that "IDRC doesn't work in health any more", despite there being one PI with an explicit health dimension and several important ongoing health projects. The budget of $75,000 to which the Senior Scientific Advisor for Health has access does not allow any significant leveraging in or out of the Centre and contributes to the perception among programme staff that the Centre is in fact only peripherally interested in health.

Expected Programme collaboration on Governance, Equity and Health (over 3 years)

Program	**Region**
Ecohealth*	LAC, Africa, BAIF
Governance and health delivery services*	Pan-African
RITC	Global
MIMAP (MAP Health II)*	Global, Africa
TEHIP (phase 2)*	Eastern Africa
Acacia (ICTs and AIDS; MARA)*	Pan-African, ROSA
TEC (AIDS)	Southern Africa
PBR (Health and PCIA)	Pan-African
SUB (medicinal plants)*	Global
Support for Global health governance initiatives	Global
Support for Canadian global health research	Canada (Global)

* Proposed Year 1 start-up activities with PIs

Budget (including RX)

Item	**2001-2002**	**2002-2003**	**2003-2004**
IDRC Funding			
Program	600k	600k	600k
Operational	SSA + 3 PY*	SSA + 3 PY	SSA + 3 PY
External Funding: Co-funding			
Health Canada (ICTs and health, Ecohealth, health sector reform - comparative analysis)	200k	200K	200k
CIHR (Joint programmes in Global Health, Population Health, Health Services)	50k	500K	500k
CIDA (AIDS Southern Africa; Health systems research in support of CIDA's Social Development Agenda, Global Public Goods/WHO Commission on Macroeconomics and Health)	1,000k	1,500K	1,500k
UN Foundation (Community Health/ "NEHIP")		1,000K	1,500k
*Co-funding Totals***	*1,250k*	*3,200k*	*3,700k*
External Funding : Parallel			
Rockefeller (Equinet, Health Systems Trust)	300k	300k	300k
TEHIP Donor consortium (includes co-funding)		1,000k	1,000k

* 3PY: include PO + RO + PA

** Co-funding would entail B+C cost-recovery, estimated at 15% (190k for 2001-2002), which would contribute to operational expenses

Health Research at IDRC - Current Situation and a Vision for the Future
Christina Zarowsky, Senior Scientific Advisor-Health

I. INTRODUCTION

This paper is a preliminary review of the current situation of health research at IDRC, an exploration of building blocks for a future health strategy, and a suggested outline for health work at IDRC over the coming three or four years. It is based on extensive consultation within IDRC and among our partners and other donors, but it reflects my own opinion of current and potential health research at IDRC. It is intended as a request for a clear, funded mandate, and then to serve as a discussion document for further precision of the programme of work and budget for this CSPF.

While much more synthesis work needs to be done, my consultations over the past five months in IDRC, in the Canadian international health community, among our global health partners (both donors and agencies such as the Global Forum for Health Research), and among IDRC recipients in Eastern and Southern Africa suggest some key directions in which we can begin to move. There is extensive support in and out of the Centre both for increased IDRC visibility in health (in the form of dissemination and synthesis work), and especially for increased investment. New ideas and institutional realities related to health research linked to development and poverty reduction demand increasing attention to health.

On the Canadian front, the radical reconfiguration of health research, the redefined priorities for CIDA (the Social Development Agenda, focusing on health and nutrition, primary education, HIV/AIDS, and children and youth) for the next several years, and widespread interest across many institutions in and out of government in global public goods provide an excellent opportunity for IDRC both to influence Canadian agendas, and to increase its presence and impact in the international health field. The international context is characterized by increased attention to health in the fight against poverty, global health threats – most notably AIDS – and the increased visibility of health systems through the controversial but widely publicized World Health Report 2000. One of the difficulties faced by IDRC is a perception, especially in the Canadian research community, that we have abandoned health. The decline in funding allocations which feeds this perception is compounded by three other factors: 1) much of the remaining health support – for example, to TEHIP and other secretariats– is invisible to a cursory review of IDRC web and documentary publications; 2) the research that has continued to be supported under various PI's is also hard to find for web visitors looking for "health", and conventional health researchers sometimes have difficulty appreciating its significance; and 3) many IDRC programme staff also believe that the Centre no longer supports health research, and say so to potential recipients inquiring about health

programming. A website on "Health Research at IDRC" is being constructed to increase awareness of health-related activities both within the centre, and externally. In the absence of significant new "A" category resources for health research, IDRC should at the minimum continue to address health-related topics in its current constellation of PI's, and to invest modest "B" category resources in analyses and clearinghouse activities through such a webpage. However, the experience of IDRC and its reputation in Canada and globally could allow it to play a much more significant role in health and development, through some investment from IDRC to leverage outside funds.

I (i) Governance, Equity and Health

In terms of future orientations, my consultations to date (particularly in Eastern and Southern Africa and in conjunction with the Governance exploration) indicate that a general framework of "Governance, Equity and Health" would build on the strengths of current IDRC programming and could offer an excellent niche for IDRC for the coming several years. Such a perspective should address both non-health sector determinants of health and interventions to improve health that emphasize the links among service delivery, livelihood, poverty reduction, and citizenship issues. A governance framework, as understood in the governance exploration undertaken at the Centre over the past year, necessarily entails constant attention to issues of effective integration of research into policy and programming. This is particularly the case if the fulcrum for explorations of citizenship, decentralization, and legitimacy of the state is the necessarily practical issue of service delivery. Such a framework would provide a legitimate "home" – though it does not necessarily imply full financing – for the health systems- related work that IDRC has continued to support over the past several years on a case-by-case basis. This alone would go a long way to reviving IDRC's reputation in international health, particularly in Canada.

Governance includes both the process of policy making – together with its internal and external constraints, from terms of trade to economic policy – and its implementation. The latter in turn includes both the internal dynamics of health and other service delivery systems, and their interfaces with communities on the one hand and with national and global processes on the other. IDRC is well positioned to examine this range, in contrast with most other donors focussing on vertical programmes or specific diseases and in line with WHO's recent moves to emphasize the role of research in strengthening health systems.

Community management of natural resources is a governance activity: strengthening the health system and health policy connections of Ecohealth, and shifting the emphasis of some medicinal plant research to better address alternative healing systems as part of a total health system (and thus addressing the substantive "health" issues as well as citizen and state roles in management, regulation and financing), could increase the health impact of these PIs' portfolios. I have not yet had the opportunity to explore other NRM portfolios in depth.

Service delivery for health, examined in a "governance" and not strictly technical or financial context, can bridge the apparent gap now seen in CIDA between "governance" (typically understood as inter-ministerial and inter-civil service cooperation) and basic needs: effective regulation, management and delivery of health care is a key determinant of health outcomes in our partner countries. This offers the possibility of more effective partnership with CIDA in the health field than has been possible over the past several years.

Governance at the international and global levels is also relevant, as few countries are able to act independently and much relevant research can be transferred from one setting to another. IDRC participation in Canadian and international fora, aimed at encouraging "global health thinking" (and, ultimately, global health action to redress the 90-10 gap described below), is thus an integral part of a coherent "Governance, Equity and Health" approach.

The issue of HIV/AIDS cannot be ignored in sub-Saharan Africa. A "governance" framework would allow AIDS to be the key entrypoint where this is particularly relevant: AIDS in Southern Africa is such a critical issue that the long-talked-about intersectoral collaboration might actually happen, with impacts both on the epidemic and on governance processes themselves.

I (ii) The Scope of Health Research

Two definitions of the scope of health research are particularly relevant for understanding the history and the potential of health-related work at IDRC. One comes from the newly-created Canadian Institutes for Health Research (CIHR), and the other is Essential National Health Research.

Health research in Canada has been funded by a number of agencies with differing mandates. The flagship funder has been the Medical Research Council of Canada, which emphasized curiosity-driven, investigator initiated biomedical, clinical and epidemiological research. Over the past several years, it was increasingly recognized that a more integrated approach to both conceptualizing and funding health research was essential to promote both scholarly excellence and, more importantly, the health of Canadians. Consequently, the new Canadian Institutes for Health Research (CIHR) were created. CIHR will now support research addressing the following areas: *1) biomedical (including basic biology and pathophysiology) and clinical, 2) health systems and health services, 3) health of populations, 4) societal and cultural dimensions of health (including economics, politics, history, culture, social organization etc) and environmental influences on health*. IDRC has in the past invested in each of these four core areas. However, our strongest work in recent years and for the current CSPF will be in the latter three, especially in bringing a participatory, multidisciplinary and equity-oriented perspective to research on health systems and services. Our international

reputation rests largely on achievements in this area. IDRC is seen as one of the few international donors who effectively support Southern priorities in health.

The concept of *Essential National Health Research* arose out of the 1987 Commission on Health Research for Development. IDRC was one of the key players in the initial explorations and has continued to support organizations, such as COHRED and the Global Forum for Health Research, which support the ENHR process. ENHR emphasizes the need for countries to invest in *research and research capacity on (1) country-specific health problems, with a view to formulating sound policies and plans for field action, and (2) contributions to global health research aimed at developing new knowledge and technologies to solve health problems of general significance but also relevant to the population of the country. The purpose of such research is to contribute to equitable health development, and through this to contribute to equitable development in general.* Indeed, the strong position has been taken that health research (or other research) in poor countries can only be justified if it contributes to equitable development. The ENHR approach to health research is relevant to IDRC because it captures the approach the Centre has taken in addressing the scope outlined in the CIHR definition. Secondarily, it is a conceptual framework – with operational implications on stakeholder involvement etc – with which the Centre has historically been identified and thus offers visibility and credibility.

Finally, *health systems* and the *health sector* are understood in this paper as they are in the WHO World Health Report: those policies, activities, and institutions which are put in place with the primary goal of improving health or, in the case of health systems, offering financial protection to users of health care services. This distinguishes the health sector from critical *determinants of health* such as economic policies and conditions, housing, education (outside of directly health-related education) but the two must be understood and acted upon iteratively. Water and sanitation services in very poor environments should be considered part of the health sector.The downside of a narrowly sectoral approach to health is that it tends to obscure the often overriding importance of non-health sector and non-medical factors and to limit "health systems" work to "public medical care", even though, for example, tobacco control legislation undertaken by ministries of finance, customs, agriculture and trade may be intended primarily to improve health and thus should fall under the "health systems/health sector" definition offered above. The advantage is that it allows some conceptual and operational limits. In this paper I speak more in terms of *"determinants of health"* and *"interventions to improve health"*. *"Healthy policies"* are relevant to both.

II. **HEALTH RESEARCH AT IDRC**

IDRC has had a long and extensive involvement in health research, although like other programme areas health research was significantly affected by a series of government cutbacks and IDRC reorganisations over the past decade. This is reflected in the graphs of overall and health sector project and financial support. After the Rio summit, IDRC was identified as an Agenda 21 agency, and consequently more emphasis was placed on

environment and natural resource management activities supported by the Centre. In the face of further cutbacks in the mid 1990s, it was decided to downsize some areas further and cut others altogether. Health was in the former category.

The only current programme initiative with "health" in its title is Ecosystems Approaches to Human Health, which supports research that aims to improve human health through participatory interventions on natural and human-made ecosystems. However, health continues to be addressed in a number of other PI's, and indeed the downsizing and dispersion of health had the salutary effect of forcing economic modelers, agricultural scientists, intellectual property thinkers, social policy planners and other non-health sector researchers –both in-house and in the outside world—to begin addressing health issues. What this has meant overall, however, is that funding and – perhaps more importantly – technical capacity has decreased while scope has increased.

The CSPF emphasis on natural resource management, social and economic equity, and ICTs provide an excellent basis for health research. At the moment, new programming in health is primarily undertaken through the Ecohealth PI, which addresses equity concerns through its emphasis on gender and participation. SUB's programme on medicinal plants is important in intellectual property and biodiversity terms, but the potential impact on actual health status over the medium term is modest unless medicinal plant use is examined in the broader context of a pluralistic health system. With the closure of the ASPR PI and the current areas of focus of Acacia, SEL, TEC, PBR, there is very little scope for research primarily focused on health as a significant dimension of social and economic equity. Discussions are currently underway about the possibility of building on the MAPHealth project in the MIMAP PI and preliminary discussions with the SSA-Gender indicate areas of common interest, but otherwise there are a number of orphan projects and networks, largely looking at health systems and equity issues. In the past, IDRC has stressed environment, community participation and social science perspectives, and health systems in its health programming. The first two components have been well integrated in the ECOHEALTH PI and, indeed, throughout most PI's in the 10 years since this integrated strategy was first launched. In contrast, the strong body of IDRC-supported policy, operational, and conceptual research and researchers in the area of health systems is at loose ends, and this at a time when "governance" in both technical and socio-political terms is an important issue in Sub-Saharan Africa. An area of work for the Centre in general is to better articulate the relationships between "natural resource management" and "social and economic equity." In particular, the micro-level analyses conducted under "participatory" PIs, and the macro-modeling analyses undertaken by more "policy" PIs, do not adequately build on each other in the health field at IDRC. A "governance" approach, which would entail the incorporation of questions of politics and power into what often becomes technicist research, would go some way to addressing this problem.

Appended to this paper is a list of current and recently completed projects related to health, with a narrative review of current health work and potential entry points for future research. I have spoken to many PI members but further discussions and synthesis are

essential. Given a mandate from the Centre, I would continue the exploration that has begun of possible entrypoints and concrete next steps, over the remainder of this fiscal year. Included in this section is a description of TEHIP, one of the important health-related activities that do not have a "home" in current programming, but on which much of IDRC's continuing good reputation rests.

TEHIP **(Tanzania Essential Health Intervention Project)**- TEHIP arose out of the 1993 World Development Report, as the first case of implementation/analysis of a package of Essential Health Interventions. The project got $15 million over several years, $2 million for research. The intervention was to invest up to $2 per capita over 3 years for the health interventions and capacity strengthening of District Health Management Teams and to use population-based burden of disease data on conditions for which cost effective interventions are theoretically available as one guide for resource allocation. (The others are costs, and community preferences.) It has been very successful in reshaping district health management. Health impacts are still being measured.

TEHIP provides an experiment in capacity building both for research (consortium approach) and for development (by coupling a research and development agenda on the ground). It fosters new alliances by bringing researchers into the service of the Ministry in assessing its reforms and breaks down some of the prejudices between academia and government. It provides the facilitation base to legitimize and translate evidence to policy, and policy to implementation, from national to decentralized level. The government of Tanzania is now interested in rolling out this model of decentralization to the other 113 districts.

The DSS (demographic surveillance system) platform has already proven to be interesting to others. A large CDC-London School of Hygiene project is underway, testing new treatment protocols for malaria and examining resistance through mapping use and distribution of the drugs plus molecular biology. Several institutions(including WB) have asked for the measurement and other "tools" that TEHIP has developed and used. The project is not quite ready to do this, but how such exchange might happen is one topic of discussion on the "Post-TEHIP" agenda.

A consultant (Irene Matthias) will be reviewing the "lessons learned" and assisting TEHIP and us with future planning.

The "Other" (non-PI) category is rather large and includes such key Centre projects as TEHIP and our support to *global bodies* such as COHRED (now coming to a close), the Global Forum (ongoing), and the Alliance for Health Policy and Systems Research (ongoing), and *ACCESS TO TB SERVICES IN SOUTHERN AFRICA*, a four country study (Zimbabwe, Zambia, South Africa, Swaziland) of the determinants of access to TB services. In particular, gender, individual health seeking behaviour, and health facility factors are being examined. This project could link to health systems and TB work respectively, offering an entrypoint for collaboration with CIDA in southern Africa. It is

these "other" projects that have largely maintained any visibility IDRC has continued to have in the global health arena, and IDRC should find a legitimate home for them. It is unsatisfactory to have to address each of many requests on a *de novo*, case by case basis, and it leaves the SSA in a difficult position when asked by potential partners or other donors whether we are active in health systems research or not. My recommendation would be to provide the minimum resources necessary for co- or parallel funding. Indeed, most of such projects should be supported by more than one donor, but it is difficult to leverage without a clear mandate and at least some funding.

II (i) Update on the Canadian front

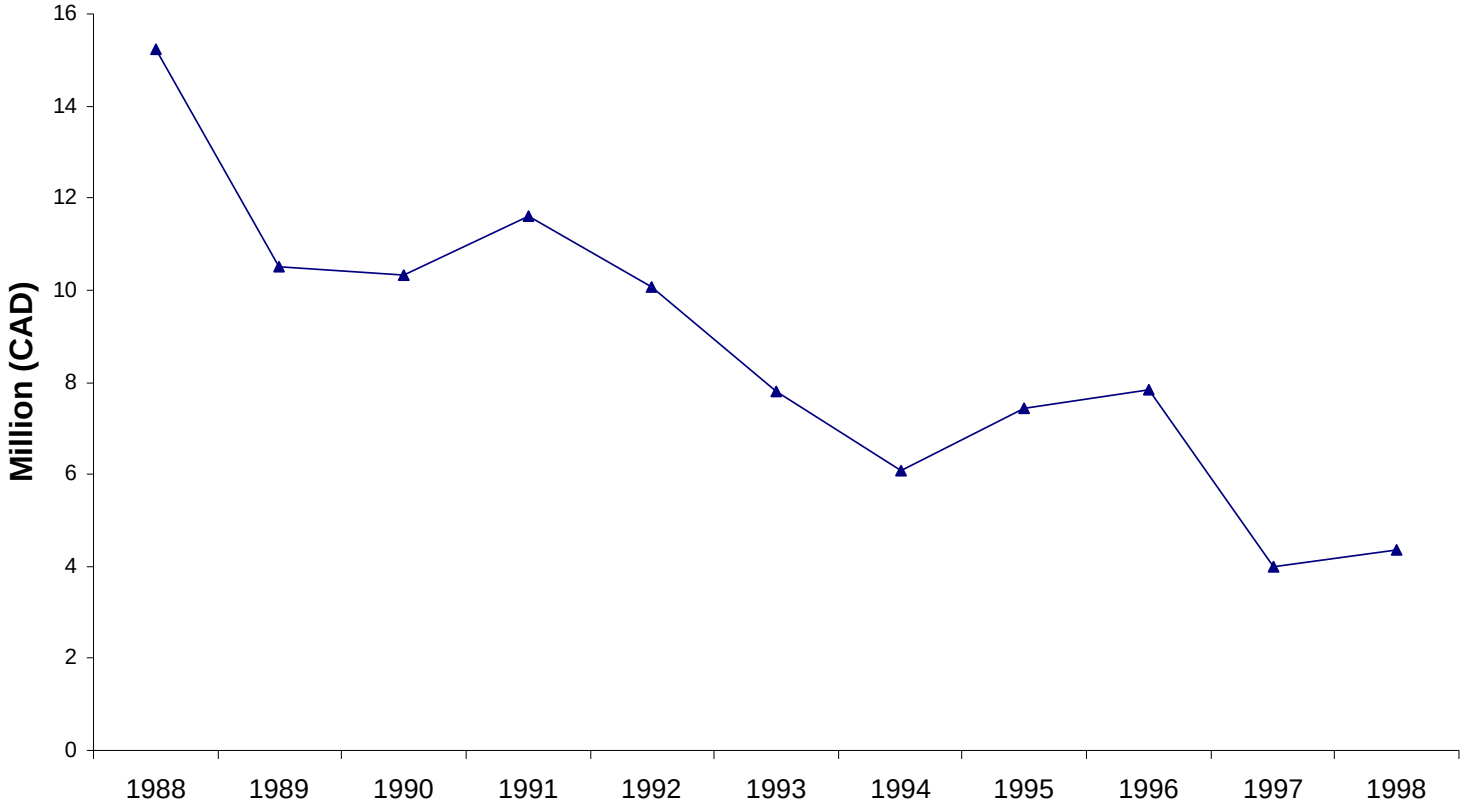
CIDA - with the significant shift in emphasis and funding at CIDA towards the social development agenda, in conjunction with an apparent new emphasis on evidence-based planning, prospects are good for collaboration in health. However, this would depend on IDRC's having a solid portfolio – or at least framework – around more visibly "health" research, including around health systems work.

CIHR - Enis Baris and Alain Berranger had spearheaded initial discussions with the CIHR. The internal CIHR process has been slower than expected - the Institutes were not formally announced until this August, and directors and scientific advisory boards have yet to be finalized for many key institutes. A draft MOU between IDRC, CIDA, Health Canada and CIHR has been circulated in IDRC, CIDA and some departments of Health Canada, but this process has been on hold for several months while CIDA, Health Canada, and CIHR reorganize. Prospects are good for establishing a separate Institute for Global Health and excellent for developing partnerships with the Institutes of Health Services and Population Health. A number of these relationships will be strengthened (and hopefully operationalized) through the April IDRC-PAHO forum.

Health Canada - PBDO and I invested considerable time and effort in establishing a partnership with the Laboratory Centres for Disease Control at Health Canada this spring. Mike Shannon was keen to transfer up to $700,000 to IDRC for joint programming before the reorganization of HC in July. Unfortunately, as IDRC is not a government department it turned out to be impossible to effect a speedy transfer, and we are back to negotiating smaller, case by case collaborations. In addition, we will be improving communications with the International Programmes area at HC, who are concerned that individual departments are going ahead too independently of overall HC thinking in this area. Nevertheless, the prospects for successful collaboration with HC are excellent.

The International Health research community - On the university front, I have quietly begun to talk to some university programmes in international health, (U of T, U de M, McGill) with a view to a) improving general relationships between IDRC and the universities and b) keeping IDRC abreast of developments in the Canadian international health community. This year as in the past, IDRC is a co-sponsor of the annual meeting of the Canadian Society for International Health. The theme of this year's conference is

Graph 1
IDRC Funding for Health-Related Projects: 1988-1998



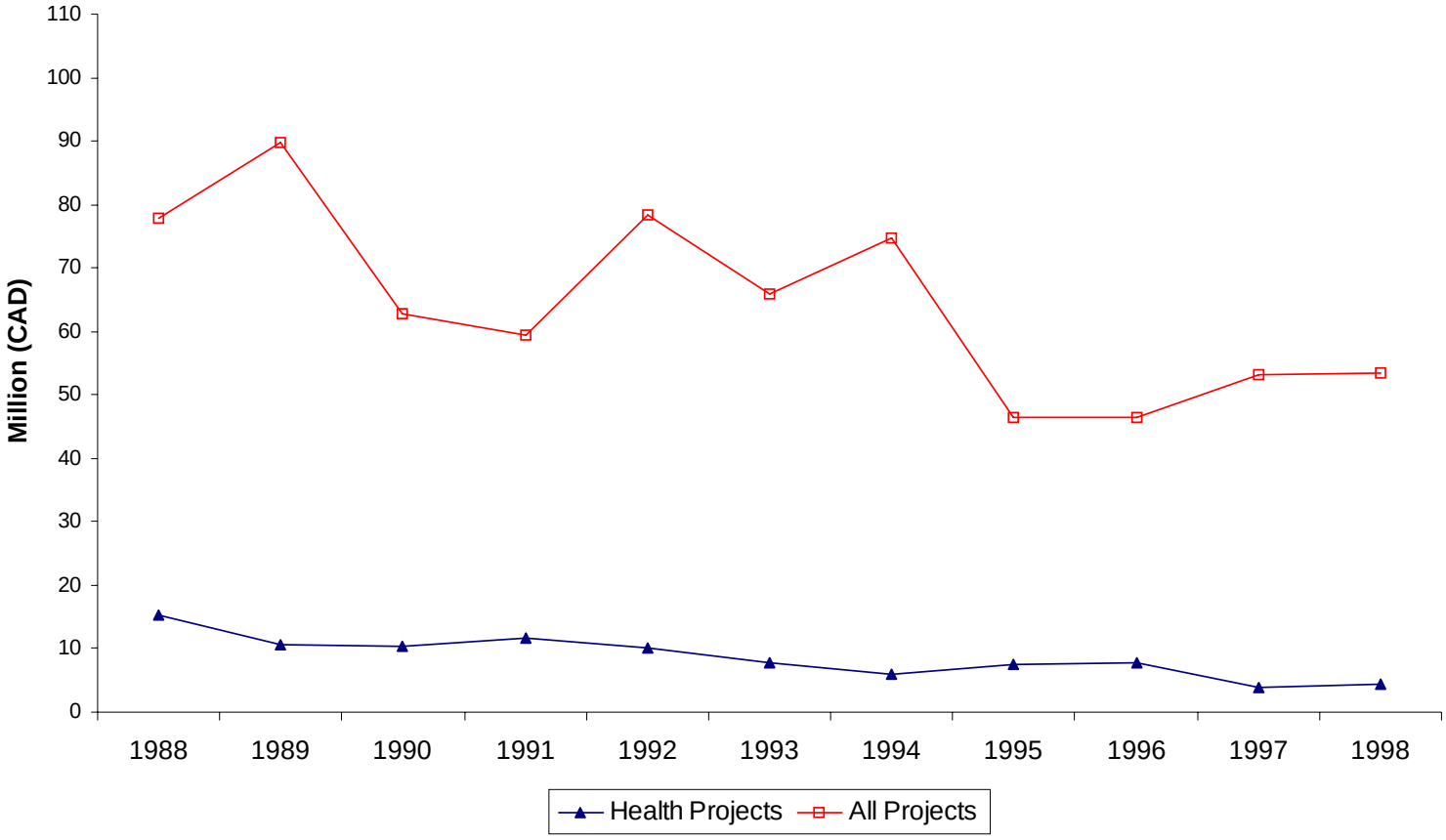
Health as a bridge for world peace. IDRC is represented in important global fora, currently trying to streamline and better coordinate health research support.

II (ii) Trends in Health Research Funding

The total health budget for 1998 was approximately 4.34 million dollars (CAD) which is 8.1% of the total IDRC budget (53.5 million). In contrast, health spending represented 19.5% of the total budget in 1988. Funds allocated to health research have been declining over the past ten years, more in health than in overall IDRC spending even after taking into account TEHIP and the secretariats - most IDRC secretariats are not health-related (see graph 1).

Technical Note: All figures were compiled and verified by CSG. The numbers include only IDRC contributions. Secretariats have been included unless otherwise specified. The numbers do NOT include RSA's or WCA's.

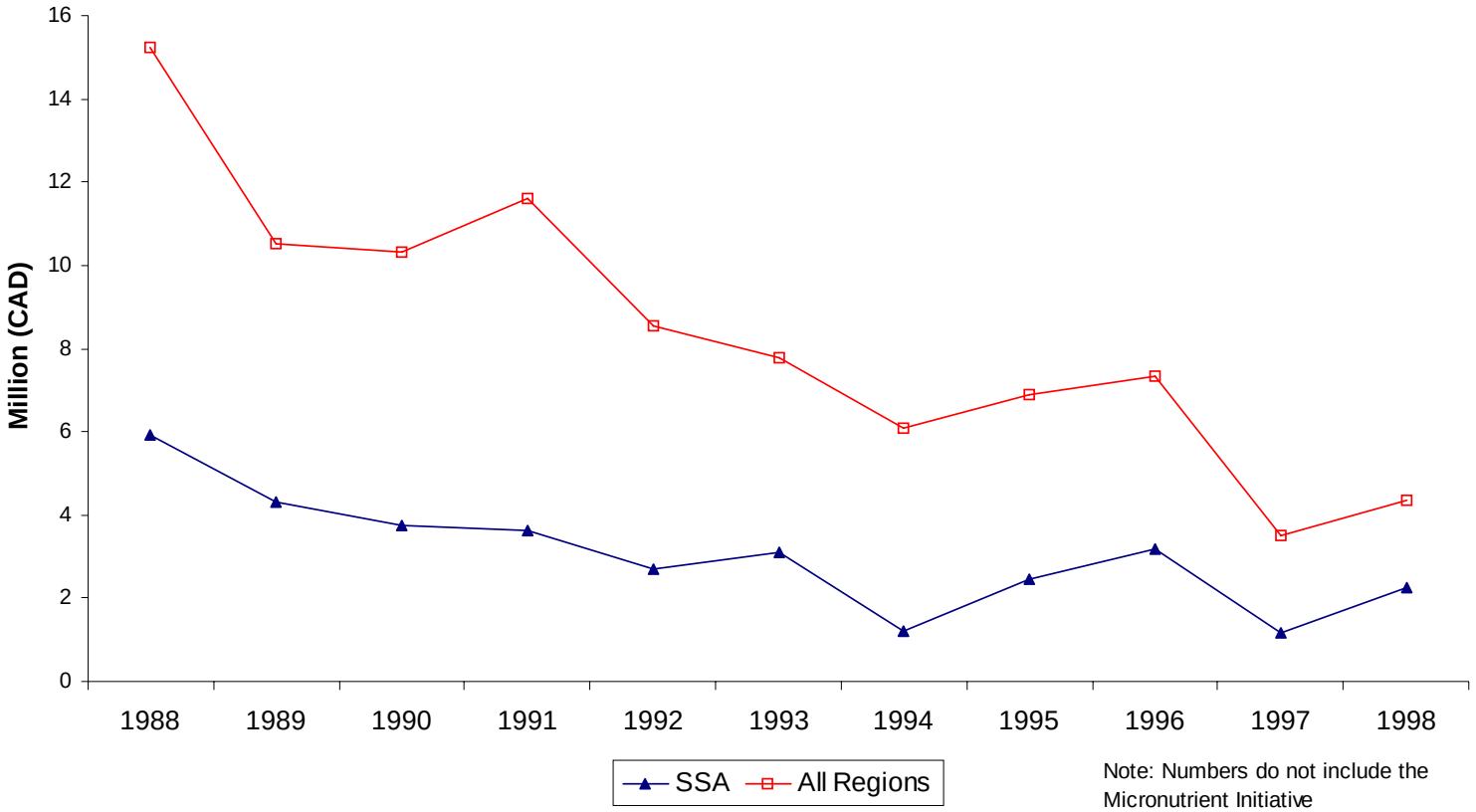
Graph 2
IDRC Health Financial Support: 1988-1998



Graph 2 illustrates the differences between IDRC financial support for health projects and all IDRC projects.

The allocation of health-related funds to sub-Saharan African (SSA) in relation to other regions is also noteworthy (see graph 3).

Graph 3
IDRC Health Funding: sub-Saharan Africa compared to All Regions: 1988-1998



III. FUTURE DIRECTIONS

A major conference was held in Bangkok in early October to evaluate the current status of health research as a tool for equitable development, with a special focus on the global architecture for health research support. Some preliminary themes that have emerged include the need for better donor coordination, the need to strengthen national and

regional research bodies and clarify the respective roles of national, regional, global, and international actors. Specifically, WHO should be supported (including through constructive criticism) in taking a leadership role in promoting health research for development, with other bodies acting where the bureaucratic structure of WHO (which gives it its authority in 191 member states) inhibits flexible or rapid responses. In terms of content, the explorations leading to this draft document were based on the initial terms of reference for the SSA-Health: to liaise with the Canadian health research community, to represent IDRC in international fora, and to advise the Centre on proposed new allocations in the area of innovations in the management of public goods, focusing on sub-Saharan Africa.

III i) Building Blocks for an IDRC Health Strategy

1. Health is a global priority

A Millenium Survey of 57,000 adults in 60 countries found that "[p]eople everywhere valued good health and a happy family life more highly than anything else. Where economic performance was poor, they also stressed jobs" (Annan 2000:16). The World Bank has identified HIV/AIDS as the greatest development challenge facing sub-Saharan Africa. The US has identified AIDS as a national security issue. AIDS was debated in the UN Security Council in January 2000 - the first time that a health issue has ever been broached in this forum. The G8 leaders pledged to attain specific targets in HIV/AIDS, malaria, and TB by 2015. In September, Canada's Minister for International Cooperation identified health and nutrition, education, HIV/AIDS, and child protection as the cornerstones for Canadian development policy and funding over the next five years. Kenya, Tanzania and Uganda are beginning to explore a revived "East African Cooperation", and have identified health as a priority for the region and for this primarily political and economic forum. Yet the global distribution of resources devoted to health research continues to be skewed massively in favour of the health needs of the richest 10% of the global population (Global Forum for Health Research 2000).

2. The social determinants of health

On another front, social movements such as Jubilee 2000 and blatant inequalities in income –with attendant social disruption -- have resulted in a new emphasis at the World Bank and elsewhere on poverty reduction. However, while G8 leaders spoke about specific diseases, they did not make any further substantive moves to fulfill earlier pledges about the thornier problems of debt relief, trade imbalances, and other economic and political obstacles to development and the ultimate objectives of development, namely, longer, healthier, and more satisfying lives for the world's population, without jeopardizing the survival of the planet.

Clearly, health is a high priority among the communities with whom IDRC works. It is

also a priority on numerous political agendas in donor countries. What is less clear is how good health can best be achieved, and what roles research –and specifically IDRC supported research–can play. Scholars and public health workers agree that the determinants of good health are primarily social and environmental: sufficient income, sufficient food, clean and sufficient water, good quality social relations.

- **The current constellation of programme initiatives at IDRC addresses many of these social determinants of health. IDRC should continue to support them, and should pay additional attention to tracing their health impacts.**

The purpose of equitable trade, economic growth, urban agriculture or legal reform is not, after all, trade or growth or new legal structures *per se*, but rather a better quality of life for the peoples now living in poverty and conflict. This is not to say that health is the only measure, but that **a modest increase in attention to health outcomes or inputs in these domains could lead to stronger recommendations to both government and civil society groups for policies and strategies to improve health by acting on the determinants of health, particularly those outside the health sector itself**.

Such an approach could also contribute to reshaping how health and health research are understood globally.

- **Specifically, research exploring the links among health, equity, and poverty reduction strategies should be a priority of IDRC health programming over the next several years.**

3. Key differences between North and South in determinants of health.

Extensive OECD research on inequalities and health carries a proviso: inequality is more important than poverty per se, and social determinants more important than public health or medical determinants, provided that annual per capita income exceeds about $4,000 US. In the meantime, both classical public health and the findings of projects such as TEHIP have conclusively shown that properly delivered, effective, inexpensive health interventions can dramatically reduce mortality and morbidity, even in the absence of economic growth. It is here that new funding from IDRC could make an important difference. New interventions that might rapidly affect the incidence or outcome of HIV and other causes of mortality and morbidity need to be developed. Concretely, however, it is in the implementation of theoretically effective interventions that the major bottlenecks to health improvement continue to reside, particularly in sub-Saharan Africa. If equity and improved health are the goals, much more attention needs to be paid to improving the quality, quantity, and accessibility of essential services.

IDRC has had a stellar reputation in the health field because it has supported innovations in intervention, health systems, operations and policy research.

- **IDRC should develop health programming that more closely links community-based, participatory research addressing determinants of health, with research**

seeking <u>interventions to improve health</u> in the short term as well as through development and social change. These interventions need not be biomedical or even public health interventions, although targeted interventions and health systems research would likely be key components.

4. Governance and health

The above discussion, as well as my consultations with researchers in Eastern and Southern Africa, is in accord with CSPF suggestions that "innovations in the management of public goods", including a significant role for health systems (public, private, mixed, and informal), should figure prominently in proposed research in the area of governance. These consultations and the literature reviewed and commissioned in preparation for Bangkok support the conclusion of the recent "Governance" workshop that research on delivery of services is a priority area for research, policy, and action in Sub-Saharan Africa, both from the technical aspects of health or other service delivery, and in regards to political issues of decentralization, citizenship, and the role and legitimacy of the state**.** Such a framework would also greatly facilitate the effective integration of research into policy and implementation, a key concern for IDRC.

Dr. Mohammed Abdullah, Chair of several health research bodies in Kenya, has identified the following key questions and issues. Similar themes have emerged elsewhere and offer a context in which to address the priorities identified in the executive summary of this paper.

1. **What are the expectations on the "new" ministries of health? (Robust capacity assessment)**
2. **What dialogue and relationships will develop between districts and Ministries, donors, and communities?**
3. **What research has been done that could have influenced policy, but did not? What might have been done differently?**
4. **Develop institutions for training, exchanging methodologies, sharing experiences.**

Improvements in the actual **quality and delivery of services** are seen by African researchers and health system managers and practitioners as likely to have positive impacts across the range of specific health conditions, which vary from country to country.

Finally, IDRC could also take advantage of the current fluidity of the health research situation at IDRC by exploring a variety of options and strategies for delivering and managing our support, and comparing them. That is, we should continue to explore governance of development research assistance, such as TEHIP's emphasis on *research being embedded in the development programme* and not simply

"piggybacked", or the possibility of “basket funding” of health research through Trusts.

5. HIV/AIDS

HIV/AIDS is a serious development problem in much of Africa and is a critical problem in many countries in eastern and southern Africa. All donors and governments should take HIV/AIDS into account in their programming. Given the resources currently available to IDRC and those being deployed by other donors in health sector and media campaigns, IDRC should probably not develop a specific AIDS programme in the health sector. Rather, we should

- **look for strategic entrypoints for addressing AIDS from outside the health sector (for example, through linking it to trade, employment, agriculture, mining and other livelihood issues);**
- **strengthen policy-relevant and action research that links**
- **(1) HIV/AIDS, poverty reduction/debt, and household impacts; and/or**
- **(2) community responses to HIV/AIDS with service delivery (health care, public health, education, water and sanitation, housing) and policy responses, and/or**
- **(3) global, national, and local governance issues related to HIV/AIDS (e.g. pharmaceutical manufacture and trade, WTO provisions for public health interests to override free trade, etc.)**;

6. Canadian partnerships for Global Health

- **IDRC can play a leadership role in extending the reach of “global health” perspectives in Canada, particularly by collaborating with individual institutes and other foundations to (1) support Canadian researchers seeking solutions to the health problems of the South, and (2) extend the research support available to Southern researchers themselves.**
- **IDRC should continue to explore possibilities for collaborating with and/or facilitating collaboration among various Canadian institutions (university, research groups, CIHR, ministries of health).**

7. International Partnerships

Most new health funding at IDRC will come largely through resource expansion. Resource expansion should be guided by IDRC priorities, as in other programme areas. A coherent framework and vision for health research would facilitate effective and efficient RX activity. Promising partnership opportunities may include UNF (TEHIP, Ecohealth), Rockefeller and other foundations involved in equity work, World Bank, and other bilateral donors. International and Canadian partnerships should seek to harmonize procedures as much as possible to minimize administrative burden on Southern

researchers, and to avoid distortion of national and regional research priorities. Some potential partnerships are outlined in the tables in the Executive Summary and identified throughout the text.

IV RECAPITULATION: A vision for health research for IDRC, 2000-2004

Consultations to date indicate substantial support for new programming in the health area at IDRC, and support for research on governance/service delivery to complement the research currently supported by other PIs. Health is identified as a priority development issue in sub-Saharan Africa. Discussions with programme staff have uniformly suggested that the Centre allocate a budget for health. The minimal scenario - status quo plus a webpage on which to post occasional synthesis papers - is seen as unsatisfactory; support for visible and substantive contributions to health research is high. Both programme staff and our partners support research-to-policy linkages, but insist on a clear focus on equity –including social, health, economic and gender equity – and community participation as a strategy to meet our mandate of "Empowerment through knowledge", and as a complementary strategy (to that of direct policy links) for influencing public policy. Finally, prospects are good for developing Canadian and international financing partnerships in support of health research over the course of this CSPF.

A vision for health research at IDRC

IDRC plays a leadership role in offering a model for an integrated, intersectoral approach to health research aimed at equitable development, through supporting explicitly "health" research programmes such as Ecohealth and TEHIP, through mainstreaming health into other programming areas, through encouraging health research to include other sectoral perspectives, and through emphasizing research-policy links both directly and through civil society. We provide seed funding and actively seek partners. IDRC continues to address health as a substantive area for examining the themes of current PIs, under the general framework of "Governance, Equity and Health". Within this framework, programming is pursued on two fronts: (1) determinants of health, and (2) interventions to improve health, emphasizing health systems and service delivery understood in both technical and "governance" terms.

Appendix 1 - Current Health Programming

NRM PROGRAMME AREA: *ECOHEALTH* - This PI's greatest importance, in health terms, is that it has contributed to an important shift in thinking in natural resource management by putting human health at the centre, and that it can contribute to a similar shift in traditional public health thinking over time. In the absence of a complementary health systems or health policy programme and with few "health" team members, ECOHEALTH's potential to reshape how health-ecosystem relations are conceptualized and to influence the health sector and health outcomes is not being fully met. It is not seen as a "health" programme at all by much of the traditional international health community in Canada: this indicates a need for change in the Canadian research community, which the PI has begun to address. However, it also indicates that ecosystem and natural resource management perspectives do not adequately address some critical dimensions of a robust approach to health, including health services themselves. Programming related to malaria, and new projects related to AIDS and agriculture and mining already under consideration, offer clear entrypoints for strengthening the health sector dimensions and linkages of this PI. UNF and the Ford Foundation have shown considerable interest in collaborating with ECOHEALTH; UNF's parallel interest in TEHIP as a model for future UNF investments in Nigeria offers another entrypoint for strengthening the "health" dimension of ECOHEALTH and, conversely, for increasing the intersectoral and specifically NRM thinking in international health.

SUB/Medicinal Plants - the medicinal plants portfolio is identified as part of IDRC health programming and is an area where further synergies are possible. I have begun to discuss these issues with the PI but wish to emphasize that our discussions are at a very early stage. At this time, its strength lies primarily in conservation, intellectual property rights, and traditional knowledge, and less so in health. This relative weakness in health derives from the lack of human resources to address the health implications of medicinal plant research. Regarding clinical research on medicinal plants, I would recommend that IDRC should not be supporting clinical trials of any medication, as we do not fund basic biomedical and clinical research. Rather, the holistic approach should continue, with a stronger emphasis on the role of medicinal plants and traditional systems in overall health systems. There is a risk, in advocating for traditional healing systems, of offering excuses to the state and donors for not acting more vigorously to ensure the availability of allopathic interventions as well, unless traditional systems are seen as part of the overall system (as they are in India, Sri Lanka and China, for example). In Africa in the early 1990s, home based care for AIDS was advocated as being "culturally appropriate" and "humane" and "affordable" - which meant in effect that the costs were carried by families and communities, particularly women. Medicinal plant research and other community-based care programming should address how to facilitate and respond to community needs and demands, care must be taken not to imply that the state or other actors have thereby been absolved of their roles and responsibilities in providing and/or coordinating services.

Other NRM PIs could also have clear links to health. CFP and ECOHEALTH, for example, have begun to collaborate in some areas. I have not yet explored other PIs' interest in strengthening their health links.

SEE PROGRAMME AREA: *MIMAP* - MIMAP houses MAPHealth, an 8-country study seeking to trace the connections among adjustment policies, specific health sector reforms, and quality of and access to care. The project uses a multi-disciplinary approach, systematic analysis and a rigorous scientific inquiry. While most of the few studies in this area sought to assess the influence of MAPs on *health*, this study examines the impact of MAPs on the *health sector*, specifically the accessibility, utilization and quality of health care. MIMAP has tentatively agreed to a second phase which would provide the opportunity to continue to focus on the health sector within the context of global changes. Research questions may focus on the impacts of equity and inequalities. This project has been managed by Slim Haddad of U de M after Enis' departure - this offers an opportunity to explore whether alternative administrative arrangements to in-house, PO management might be considered as an addition to IDRC's operation modalities.

MIMAP may also house the proposed HIPC initiative currently under discussion with CIDA. Discussions in May revealed a willingness to have health as one of the foci of analytical work on poverty reduction. I would strongly recommend this. The TEHIP platform is also under consideration as one base for HIPC research - this also would strengthen the health-economics links in IDRC, while supporting the excellent TEHIP platform. MIMAP is an obvious site for exploring links with other equity-oriented health projects such as Rockefeller's Equity Gauge. Both of these could, in turn, benefit from the addition of significant qualitative dimensions.

The *ASPR* PI supported significant work on health sector reform, both in the Americas and in Africa. The Latin American research will provide the basis for a forum on *Governance and Health Sector Reform in the Americas: The Research-Policy Interface*, organized by IDRC and PAHO on the occasion of the April 2001 Summit of the Americas. The goal of this forum is to facilitate the more effective integration of research into the process of policy making around health sector reform.

In Africa, Equinet has completed its first 18 months with very good outputs in research, in networking institutions in Southern Africa, and in finding a balance between network members who want to do aggressive advocacy work, and others who emphasize research on equity as itself an advocacy tool whose credibility rests with the quality and eventual use of the work (whether by policy makers, advocates, health service providers, or communities). Participants in the Network and at the recent meeting outside Johannesburg included the Rockefeller supported Equity Gauge project, the USAID/MSH supported Eastern Cape Equity Project, the Kaiser-supported Health Systems Trust, senior health ministry officials from South Africa, Malawi, and Botswana, and respected scholars such as Lucy Gilson, Di McIntyre, and Anthony Zwi. This network offers good prospects for further research in the area of "Governance, Equity and Health."

TEC offers many sites for possible health work, including links with RITC on tobacco and work on pharmaceuticals - particularly related to HIV/AIDS.

SEL also offers many conceptual spaces for health linkages, but my inquiries here have not been very promising to date: the PI is very conscious of the need to focus. Nevertheless, SEL would be a good collaborator for RITC on value chains and I would like to explore the possibility of some youth livelihood work related to HIV and possibly linked to ICTs. Prior attempts at developing projects on alternative health insurance schemes were not successful.

PBR has supported work with UNICEF on small arms control in Angola, and has funded the Canadian Public Health Association (CPHA) to pursue work on health systems in post-conflict settings. This would be a promising area for future work. Specifically, the current resources in PBR suggest that health-related projects might be developed, if at all, under the rubric of Peace and Conflict Impact Assessment.

ICT PROGRAMME AREA: IDRC has supported numerous projects involving electronic technologies to facilitate communication, networking, and the exchange of information among various stakeholders. Innovative approaches have been developed to the application of ICTs for more effective and equitable delivery of health services. Healthnet, Credesa, the Navrongo Health Project (which formed the nucleus of the INDEPTH network of Demographic Surveillance Systems, one of which is supporting the work of TEHIP) are some examples. Another is MARA (Mapping Malaria Risk in Africa), a very successful GIS programme currently under exploration for further collaboration with ACACIA. *ACACIA* currently does not include health among its areas of focus, but it has two telehealth projects - education and health meet in the ICT field. The population survey of Uganda telecentres has identified health as the number one priority for ICT content among the host communities. SchoolNet offers great potential for innovative work on HIV/AIDS, thus linking education and health. Health Canada has expressed considerable interest in working with IDRC on telehealth issues. ICTs are integral to the functioning of all of the health networks IDRC has supported.

SECRETARIATS: *MI* - The Micronutrient Initiative was created in 1992 to help harmonise global activities to achieve micronutrient-related goals. Preliminary discussions with MI staff revealed interest in principle in collaborating with IDRC. Further discussions have been postponed until MI's review process has been completed.

RITC - I have recently participated in RITC's strategic planning meeting. Enthusiasm is high, and a more focussed programme has been developed. Tobacco control is an excellent "showcase" for the strengths that IDRC can bring to health-related research, emphasizing the importance of "non-health" issues for such a critical problem. In Latin America, non-communicable diseases have become the major health problem. Future work in LACRO could emphasize this dimension, linking with RITC and strengthening the health sector implications of RITC's work.

Some other Secretariats could also address health related issues, notably TIPS and HIV/AIDS.

Appendix 2 -Next Steps

With a mandate from the Centre, I would continue further synthesis work and PI discussions on health at IDRC, and in the international health arena, and begin focusing the agenda for future research and the associated RX activities. I envisage a gradual development of the vision outlined above, in consultation with our partners and building on existing programming in the first instance. Among the PIs, ECOHEALTH, SUB, and MIMAP offer the most likely opportunities for strengthening IDRC's visibility in health in the short term, together with phase II funding for successful projects addressing service delivery and governance. RITC also offers possibilities, but the initiative would come from there in the first instance. In the medium term, other PIs could come on board, perhaps beginning with an exploration of health possibilities under the PCIA programme in PBR. All three ROs in sub-Saharan Africa have expressed a strong interest in developing health programming as soon as possible. Concretely, a number of projects are already underway which would occupy most of the time for the rest of this fiscal year: posting the webpage; the CSIH conference (November 2000); the LACRO policy workshop at the Summit of the Americas (April 2001); an exploratory meeting for the next phase of TEHIP; further discussions and, ideally, concrete agreements with Health Canada, CIDA, and CIHR; strengthening the health systems linkages of the major Ecohealth forum planned for 2002; helping to define a health agenda for HIPC if it comes through; advising ROSA on HIV/AIDS programming, particularly in relation to governance and ICTs; exploring possible collaboration with SSA-Gender; and offering technical support to projects identified as possible candidates for “governance” related second phases. Resource expansion should occur gradually. Additional technical support is essential for current work to be adequately undertaken – Canadian and international liaison is important but time consuming. The further synthesis work is urgent and could be commissioned, thus leaving me as supervisor and content editor rather than primary researcher for this part of the process.

Appendix 3-List of Health-Related Projects

Active Health-Related Projects

ASPR

403 Health Systems in the Southern Cone of Latin America
2392 PDM Afrique de l'Ouest et du Centre
2857 Strengthening Strategic Planning in the Health Sector in China
3930 Réseau de recherche sur les politiques sociales en Afrique de l'Ouest et du Centre
4339 Health Sector Reform: A Policy Analysis (Tanzania)
4378 MD-Equity and Health Policy Reforms (Southern Africa)
50221 Policy Decentralization: A Regional Perspective
100095 Financing Municipal Health Systems and Equity (Brazil)
100191 Health Financing Changes for Decentralization: Tools and Strategies for Health Care
100250 Decentralized Management of Health Services (Venezuela)
100327 Assessment of Privatization of Social Services

ECOHEALTH

1817 Impact of Maternal Depression on Infant Malnutrition (Tanzania)
3157 An Integrated Assessment of Agriculture Communities (Guelph/Kenya)
3200 Environment and Public Health (Israel/Palestine)
3320 Urban Ecosystem Health (Nepal)
3322 Ecosystem Health Training Awards
3323 Mercury Exposure and Ecosystem Health in the Amazon: Building Solutions
3330 Large Mines and the Community
3825 Urban Ecosystem Health Indicators (Cuba)
4291 Environmental and Health Impacts of Small-scale Gold Mining in Ecuador
4306 Ecosystem Approaches to Human Health Scholarship
4321 Human Health and Changes in Potato Production Technology in the Highland
4322 Health, Biodiversity and Natural Resources Use in the Western Amazon Lowlands
4464 An Ecosystem Strategy for Water Quality Monitoring at the Municipal Level (LAC)
50239 Environmental Health Impact Assessment in the Amazon (Phase II)
50386 Tobacco Growing and Ecosystem Effects
100091 Mapuche Environmental Resource Management
100106 Sleeping Sickness, Poverty and Natural Resource Management (Uganda)

100107 CG-Agroecosystem Management for Human Health in the Uda Walawe Irrigation
100108 Shifting Cultivation and Health Conditions in Thailand
100205 Urban Ecosystem and Human Health in Mexico City
100307 Contribution to Women's Health and Empowerment in India (BAIF)
100310 Environmental & Social Performance Indicators and Sustainability Markers in Mine
100482 Livestock and Agroecosystem Management for Community-Based Integrated Malaria
100484 Qualité de la santé humaine et celle des écosystèmes dans l'espace Buyo
920223 Leishmaniasis Control Network (Global)

MIMAP

2307 Macroeconomic Adjustment Policies, Health Sector Reform and Access, Utilization and Quality of Health Care
2852 The Impact of Macroeconomic Adjustment Policies on the Health Sector in Uganda

PLAW

100298 The Socioeconomic, Agricultural and Environmental Implications of Qat Production

SUB

4487 Health, Nutrition and Biodiversity Resource Management-Nepal
55499 Plantes médicinales (Maurice)

TEC

3772 Tourism (Peru)

Special and "other" Projects

397 Rice Ecosystems and Health (West Africa)
407 Incidence and Determinants of Low Birth Weight (Yemen)
4502 Access to Tuberculosis Services in Southern Africa
4503 Alliance for Health Systems and Policy Research (Global)
1047 Essential Health Interventions Program
1051 Comparative Health Care Policies (Latin America) II
100132 Global Forum for Health Research
1214 Corneal Infections (Nepal) III
2208 Assessing Health Utilization for Policy Development (Bangladesh)
2867 Institutional Based Decision Tool/Hospital Based Research Systems

(Global)
2915 Needs Based Technology Assessment Tool Kit (Global)
3090 SUP UNU-INWEH
3263 Institutional Research Capacity Building (Benin)
3695 Environmental Management Development in the Dnipro Basin
3740 Policies for Urban Agriculture (Jordan)
3979 Traditional Media in Learning for Change
45025 Quality of Life in Urban Slums (India)
50006 Non Conventional Surveillance with Community Participation
50007 Gold Mining in Amazonia
50257 Equity-Oriented Health Policy Analysis in Latin America
50317 Mining Policy Research Initiative (Latin America)
55127 Victoria Lake Basin Management Research
65203 Utilisation des Acquis Educatifes dans les Stratégies Reproductives des Femme
65255 Apprentissage et pratique sanitaire au Sénégal: un project de recherche-action
100500 Flood Relief Research Program (Mozambique)
880171 East Africa Pesticide Network
910059 Promoting ENHR in Bangladesh: Proposal for a Research Award Scheme
910194 Ethnoveterinary Practices (Nigeria)
920107 Environmental Pollution at Obusai Gold Mines (Ghana)
920220 Institutional Research Capacity Building-Phase III

Recently Completed Health-Related Projects (As of 01-00)

ASPR

2851 Research Network in Health Systems and Health Policies for Central America [Sep/00]
3159 Adolescence and Social Change in Egypt [Mar/00]

ECOHEALTH

2966 Validation & Field Testing the Barometer of Sustainability (Global) [Mar/00]
3507 Environmental/Social Performance Indicators and Sustainability Markers in Mineral [Jul/00]

SUB

3233 TRAMIL: Central American Network on Medicinal Plants II [Mar/00]

Special and "other" Projects

428 Geographic Information Systems for Endemic Disease Control (Botswana/Senegal) [Mar/00]
1589 Capacity Building in Public Health/HSR (Latin America) [Sept/00]
2409 Evaluating Health Service Delivery (Global) [Oct/00]
2807 Health and Environment Policy Impact (Philippines) [Mar/00]
3018 Promoting Sexual Health (Uganda) II [Sep/00]
3599 Paediatric Aids (Kenya) Phase III [Mar/00]
65050 Réseau Africain de Recherche sur le SIDA (Zone Afrique de l'Ouest et du Centre) [Sep/00]
928463 Publications and Information Centre-Makere Medical School (Uganda) [Mar/00]

Health-related Projects in the Pipeline

ECOHEALTH

Ecosystem Management for Improved Human Health in the Buyo Region
Livestock and Agro-ecosystem Management for Community-based Integrated Malaria Control (ICIPE)
Workshop and small grants program in West Africa/Middle East and North Africa (MENA)
Myotoxins in Agro-Ecosystems (Guatemala and Southern Africa)
Floriculture (Ecuador)
Manganese exposure in general population resident in a mining district in Mexico
Mining in Nicaragua
Alimentation et environment urbain à Dakar (Ecoyoff)
Dengue PBDO

Technical Notes: All health-related active and recently closed projects were located by a keyword search using "health" on Epik.