REVIEW ARTICLE

Meeting the Challenges of North-South Collaboration: The Case of HIV Prevention for Rural Youth, Edo State, Nigeria

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Abstract

Despite the significant contributions of the various North-South research partnerships during the past five decades to enhancing research capacity in the South, they have faced a number of challenges associated with the various partnerships. There have been limited attempts to critically examine the successes and challenges associated with these partnerships. Based on the experiences of implementing the 'HIV Prevention for Rural Youth' programme by a Canadian-Nigerian partnership during a four year period, this paper outlines the successes achieved and the challenges faced. The paper reviews the context of contemporary North-South research collaboration which provided the framework for the implementation of the HIV Prevention for Rural Youth. It then examines the benefits which the implementation of the programme have stimulated as well as the various challenges which confronted the partnership and how they were handled. The implications of the project's implementation experiences for future North-South collaborative research programmes are highlighted (*Afr J Reprod Health 2012(Special Edition)*; 16[2]: 127-146).

Résumé

Malgré les contributions importantes des divers partenariats de recherches de Nord-Sud, au cours de cinq dernières années, vers la promotion de la capacité de la recherche au Sud, un certain nombre de difficultés sont liés aux divers partenariats. On a tenté d'une manière limitée, à examiner de façon critique les succès et les défis liés à ces partenariats. En se fondant sur les expériences de la réalisation du programme de la « Prévention du VIH pour la jeunesse Rurale » par un partenariat Canadien-Nigérian au cours de quatre ans, cette étude met en lumière le succès accompli et les défis rencontrés. L'étude passe en revue le contexte de la collaboration de la recherche Nord-Sud contemporaine qui a donné le cadre pour la réalisation de la prévention du VIH pour la jeunesse rurale. Elle étudie les avantages que le programme a stimulé aussi bien que les divers défis auxquels le partenariat a fait face et comment ils ont été résolus. Nous avons souligné les implications des expériences de la réalisation du projet en vue des futurs programmes de recherches collaboratrices Nord –Sud (*Afr J Reprod Health 2012 (Special Edition)*; 16[2]: 127-146).

Keywords: collaboration, North-South, research challenges, Nigeria

Introduction

Different international research partnerships linking research groups and institutions in the global North and South have emerged in the past four decades. These partnerships can be described as expressions of higher education's contribution to the promotion of international development with particular reference to the need to bridge the

North/South knowledge gap. Donor policies regarding North-South research cooperation have changed considerably over the past forty years. During the 1960s, research cooperation consisted mainly of technical assistance from the North to the South largely in the training of young academics in institutions in the North. In the 1970s there were attempts at strengthening research capacities in developing countries, especially the

improvement of access to sources of scientific information in the North. Since the early 1990s, the policy emphasis shifted to fostering collaborative research networks in which Northern and Southern partners participate on equal terms, including both concrete collaborative research projects and research training programmes for Southern partners. It has been suggested that the four decades of North-South research partnerships contributed remarkably to enhanced human and infrastructural capacity, as well as to a better integration of the Southern partners in international academic exchanges ^{1, 2}.

Despite the significant contributions of various North-South partnerships to enhancing research capacity in the South over the years, a number of weaknesses have been identified in the literature¹, ². In the first place, the impact of North-South partnerships on research capacity building has often related more to individual rather than institutional capacity building^{3,4}. Secondly, the partnerships have also been criticised for focusing too much on the one-directional transfer of capacity from the North to South, which is usually at the expense of effective partnership work, mutual learning and responsiveness to the peculiar need of institutions in both the North and the South. Indeed the rationale for most North-South partnerships has been narrowly focused on addressing capacity gaps in the South and less on the learning and building of capacity within Northern counterparts^{5,6}. In the third place, North-South partnerships have also been largely managed from outside the developing countries, and their sustainability has been donor-dependent⁷. Fourthly, the challenge of nurturing long term mutual partnerships has frequently proved to be at odds with the shorter-term timelines of most donor-funded programmes. For example, it has been noted that less attention is paid in most of these partnerships to influencing public policy. Nowhere is the value of research for development in the context of African countries more striking than in its contribution to policy development and ultimately to programmes and services offered to citizens 8,9. Furthermore, the focus of most of the North-South partnerships has often been on science and technology which receive greater attention and funding from donors in the North¹⁰.

There is no doubt that the tendency to think of research in the countries of the South only in terms of natural and technical sciences risks social sciences and humanities being somewhat forgotten despite their invaluable contributions to development planning and policy making in developing countries.

Finally, there is also the challenge of inadequate studies of the experiences of North-South research partner-ships. Researchers and donors involved in North-South development research projects lament that there are very few studies on these partnerships to support critical reflection and the refining of approaches to collaboration. Although some studies and evaluations of collaborative research endeavours exist in the literature. significant gaps remain in the body of knowledge on North-South research collaboration, which should be addressed. Most of the literature appears to have been produced by Northern scholars. More indepth examinations of partnership by Southern researchers would be an invaluable complement to the current literature. It is against this background that this paper examines the experience of the Canadian-Nigerian partnership the implementation of HIV Prevention for Rural Youth, Edo State Nigeria. The remaining part of the paper is divided into four sections. The first section reviews the context of contemporary North-South research collaboration provides the framework for the implementation of the HIV Prevention for Rural Youth. The second outlines the benefits section which implementation of the HIV Prevention for Rural Youth project has stimulated while the third section discusses the challenges faced during its implementation. The fourth section examines the implications of the project's implementation experience for future North-South collaborative research programmes while the final section concludes the paper.

The Context of North-South research collaboration in Africa with specific reference to Nigeria

Collaboration in research can take a variety of paths, but it is often in the form either of cooperation between two researchers or

organisations. Although cooperation normally takes place between two researchers, in practice this collaboration also takes place at other levels, e.g., between research groups within a department, between departments within the same institutions, between institutions, between sectors, and between geographical regions and countries.

Examining the impact and challenges of a North-South research partnership project in Nigeria needs to be carried out against the background of the nature of the higher educational system within which such a partnership is implemented. In the colonial and independence years, specifically between 1950 and the 1970s, the question of the quality of the universities in Nigeria was not an issue because they generally met what can be called international standards. This was due largely to the crucial fact that for many years the institutions remained small with low enrolments and, in addition to substantial state subventions, benefited from support by foreign governments and international donor agencies and foundations¹¹. Staff enjoyed reasonably good conditions of service, and there was in place an adequate staff development programme. All this meant that when the expatriate staff started leaving, the institutions had the indigenous staff, the systems, the values, the resources, and the facilities to maintain quite high levels of teaching and scholarship. Indeed, vibrant local research led not only to the production of international quality work but also to the rise of acknowledged centres of excellence in particular fields^{11,12}. The conditions facilitating development and the maintenance of international standards in Nigeria's universities and indeed other African universities were to undergo substantial and dramatic change in the late 1970s and throughout the 1980s and 1990s as Nigeria began a slide into economic decline. Military regimes had no sympathy for the universities, which they believed served as centres of social critique and political opposition. The federal and state governments accumulated large debts that had to be serviced with funds that could otherwise have gone for education and other social services. The World Bank encouraged various countries in sub-Saharan Africa to embark on Structural Adjustment Programmes which further negatively

affected the funding of universities. By the late 1980s, governments began redirecting funding from higher to basic education, in part at the insistence of international lending institutions, which argued that with high levels of illiteracy in Nigeria and indeed Africa, money spent on basic education would be most likely to alleviate poverty. At the same time, many donors reduced support for higher education, including high cost graduate scholarships, and phased out subsidies for expatriate faculty members teaching in Nigerian Furthermore, universities. the collapse communism in the former Soviet bloc brought an end to the generous scholarships that allowed many young Nigerians to undertake their university undergraduate and postgraduate studies in Eastern Europe. In a vicious cycle, worsening conditions have led many of Nigeria's best minds to emigrate to the Northern hemisphere, where they benefit from far superior academic facilities and living conditions. Their departure deprives Nigerian higher education of its most important resource: local intellectual power. To make matters worse, declining state support came as tremendous increases in enrolments put added strains on institutions¹³.

The story of the resulting deterioration in physical conditions in Nigerian universities in the 1980s and 1990s has been told extensively in the literature¹⁴. There are reports of students having to take lessons standing, for lack of seating space in the classrooms; while in other instances some students have to listen to lectures from outside the classroom. Libraries are not only overcrowded, but books are out of date, whilst journal holdings lag years behind. Small-group tutorials, industrial and other attachments, and fieldwork are hardly feasible in many universities. Science students go through degree programmes with no hands-on experience of computers, scientific equipment and basic experiments. Across both science and social science, students learn subjects such as statistics, design and data analysis research interpretation by rote memorization, with no access to the technologies that are essential to contemporary research. They also lack access to contemporary research literature. In combination these keep students ignorant of contemporary debates and developments in thinking, knowledge and methodology. Faculty and students alike lag behind their peers in the North and are severely limited in their participation in and benefit from global advances in their field. These unfortunate developments have taken place at a time that the role of knowledge in social development has become accentuated, caused by transformations in the global political economy and the heightened significance of information and knowledge to production, management and services throughout the world^{11,12}. Thus a 25-year or more period of neglect, during which the international community largely ignored the tertiary sector's role in development in sub-Saharan Africa, left Nigerian and indeed other African universities struggling to retain academic staff needed for teaching and research.

In the last fifteen years there has been cause for cautious optimism that universities across Africa would start to see the investments that they urgently need for sustainable growth as centres of high quality research and teaching. Several prominent reports from the Economic Commission for Africa, the G8 and the World Bank have accorded greater significance to higher education, and the African Union has declared higher education priority continent-wide a for development, most recently in its Plan of Action for the Second Decade of Education in Africa^{10, 15}. The vast majority of tertiary institutions rely on state funding, but all too often this is insufficient to cover day-to-day costs, let alone redevelop crumbling infrastructures and invest in future scholarship. External support is therefore vital to the renewal of African universities, and this is particularly true of research, which often receives relatively little of overall university budgets. Existing funding schemes that have provided pockets of scholarship and research funding for many years have now been joined by others, as new donors inject fresh financial support into African universities. This also means universities and academics must now negotiate a complex web of funding, disbursed by myriad agencies who seek variously to develop capacity, train scholars. and strengthen international research links.

A key element of the renewal response has been the idea of North-South collaboration, with support and funding provided by donor agencies to enable the formation of research partnerships African Universities and counterparts in North America (United States and Canada) and Western Europe. International collaboration allows African researchers to work together with Northern and other Southern colleagues, which is essential if they are to be able to catch up to and establish themselves within the international academic community. The benefits of this model are enormous for the revival of quality research. It also means African academics could potentially benefit from access to the resources, facilities and expertise of better equipped institutions, enabling research to proceed at levels which would not be possible with the current state countries' higher education many infrastructure¹⁰.

The value of North-South collaboration has been widely acknowledged in several reports, and there have been several attempts to investigate the needs of and strategies for collaboration. Many of these have, however, focused on thematic or methodological priorities. The practical constraints have been less well documented, and where they are discussed it is usually in more general terms without specific and feasible suggestions of how these might be met. Collaborations often depend on the energy and commitment of individual academics. If researchers are lucky enough to obtain funding, they must then manage this through the course of the project. responsibility for other members of their team, including managing other colleagues and research assistants and students, and deal with the everyday problems that arise when trying to sustain joint work over long distances. The remaining part of this paper therefore sets out to outline the everyday practical, managerial and administrative challenges to collaboration and the benefits associated with the implementation of the HIV Prevention for Rural Youth project in Nigeria.

The Context of International Collaborations in Canada with a Specific Reference to HP4RY

Together with teaching, research is a cornerstone of academic work in Canada and evidence of

research productivity a requirement in academic positions. In Canada, funding for such work is through three main sources: government, private not-for-profit enterprise, and foundations. Research funded by private enterprise is based primarily on furthering the interests of the funder and uses a contract or contract-like model where the funder controls the research and owns the This work often does not lead to output. publications that contribute to career advancement in academia, especially in the social sciences. Consequently, many academics eschew contract work all together. It is the researcher-initiated, controlled, owned and publishable work that is more common. This is funded by government and not-for-profit foundations with government the major contributor. These funds are available solely researchers in Canadian institutions (universities, hospitals, etc.) primarily for projects in Canada and addressing Canadian interests and/or 'problems.' In fact, most applications for funding are required to articulate how the research will benefit Canadians. Thus, support for collaborations with non Canadian partners or research conducted outside Canada (unless it can be demonstrated to benefit Canadians) is limited. The two government bodies that focus on work outside Canada, primarily in low and middle income countries (LMIC), the Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC), have more limited funds available and only the mandate of the latter includes research. Changes began to occur in the early years of the twenty-first century. One such change was the Global Health Research Initiative, funded by a coalition of five Canadian government agencies as 'experiment' in more international. collaborative work. Team grants, to address specific health problems in specific LMIC, involving partners from Canada and the targeted country, were among the suite of programmes funded under this initiative. Each Team Grant included research, knowledge translation and capacity building and required a design that was developed through North-South collaboration of not only research partners but also representatives of knowledge users. Oversight of the projects was assigned to IDRC with the management

approaches used by IDRC applied to the projects. These constituted a hybrid between research grants and contracts. Similar to grants the projects were conceived and designed by the teams and the data produced were owned by the respective teams with the expectation of academic publication as a significant output. Similar to contract research, the lead institution and one team member from that institution entered into a contract with IDRC to follow the approved project design and budget and abide by a set of rules.

These rules included, for example, monthly reporting of specific activities and progress toward goals and objectives of the project; disbursement of funds from IDRC to the lead institution on a twice-yearly basis contingent on submission and approval of a financial and progress reports covering the prior 6 months; and approval of IDRC for any major changes in financial allocations and project activities. HIV Prevention for Rural Youth: Nigeria (HP4RY) was funded as one of these Team Grants. It is a research partnership between Canadian and Nigerian researchers and knowledge-users that includes 4 components: research, translation of research knowledge into HIV prevention programming in schools and communities using local resources, mobilization and evaluation of the programming, and capacity building. The goal of the project is to address risks and vulnerabilities to HIV infection among youth living in rural communities in Edo State, Nigeria.

For the Canadian partners, this project is a new experience on several levels. First, it affords a rare opportunity for research in a LMIC in full partnership with colleagues in that country. Although five of the six Canadian partners had prior experience doing research in sub-Saharan Africa, the experience of only one includes the full array of components included in HP4RY. Second, this project diverges from the research-only model that has been most typically funded and remains the expected standard in universities, to include full knowledge translation and capacity building components. Third, it is governed by the hybrid design that combines elements of a research grant and contract. Thus, this is as much an 'experiment' for Canadian team members as it is for IDRC and as much a challenging new experience for them as

it is for their Nigerian partners. The experiment must be understood as set against their job expectations and criteria for maintaining and advancing in their academic positions which focus, to a great degree, on the quality of their teaching in their home institutions and publication in peer reviewed venues. It must also be set against their training and expertise which focuses on research and publication. Canadian academics spend an average of 50-60 hours a week fulfilling the traditional tasks of academic work, with those who have the most active research agendas among whom are the Canadian team members on HP4RY often exceeding this number. HP4RY increases these hours by adding capacity building, more complicated and time-consuming collaborations, and knowledge translation and mobilization. Canadian team members entered this project motivated by the desire to strengthen research capacity, contribute to a pressing health problem, and gain experience in partnering with colleagues in Nigeria. However, they needed to balance the demands of this project against their already heavy workloads and the requirements for career advancement.

For the Nigerian team members, the project provided an opportunity for collaborate research amongst Nigerian researchers who belong to four different institutions on the one hand and between them and researchers from Canada on the other. Lack of local funding for research and the inability of Nigerian researchers to attract the competitive research grants from international organizations based in advanced countries has restricted the exposure of many Nigerian researchers to large scale collaborative research. This project facilitated such collaboration for them. In addition, the action research model used in HP4RY is new to most members of the Nigerian team and this project provided the opportunity for Nigerian research team members to be exposed to the implementation of this model. Finally, the project also provided the opportunity for the Nigerian team members to be exposed to large scale project management systems and challenges entailing regular project management meetings and the collective resolution of any challenges experienced during the implementation process.

Benefits of the Canada-Nigeria research partnership for researchers and institutions

HP4RY was developed by a collaborative research partnership between academics in Nigeria and Canada, not-for-profit organizations active in the field of youth sexual health and rural community development in Nigeria, Canadian and Nigerian universities, and the Ministry of Education in Edo State, Nigeria. Staff who were hired by and stayed with the project over all or most of its 4.5 year duration included graduate students and recent graduates from Nigeria and Canada. Partners named on the original proposal and staff worked together as a team throughout the project. A list of these participants can be found in Appendix I. The conception and implementation of HP4RY brought about considerable benefits to the partners and staff. These can be broadly examined under three major categories: capacity building; research, publication and dissemination; articulation and service delivery.

Research Capacity building

There is no doubt that collaborative, international research partnerships expand the knowledge base of all involved, ensure that an extensive range of experience can be brought to bear to solve global and national development problems, and help improve knowledge infrastructure and strengthen capacity for research management. If one accepts the fact that the future belongs to knowledge-based economies, capacity building to enhance research competence in Nigeria is essential to build a more secure and prosperous economy. In the face of rapidly advancing globalization, building capacity for international research collaboration in both Canada and Nigeria are essential to the positioning of both countries. The Canada-Nigeria action research project recognized this challenge in its conception and implementation. The partnership exemplified how brain drain from low to high income countries can be stemmed by building advanced training programmes within Nigeria and enticing recent graduates adequate with employment. A two-way exchange implies participatory and multidisciplinary approaches to

research, from the conceptualization of the research problem all the way to the use of research results. Such two-way exchanges between Canada and Nigeria yielded benefits to researchers in both countries. For example, cross-cultural interactions among researchers on the project team led them to approach research problems differently, which resulted in new concepts and solutions. They had the chance to disseminate their results in publications, and conferences that targeted the international academic and policy influencing communities as well as in meetings, seminars and summits that targeted local community leaders, government, nongovernment and civil society institutions and policymakers. Opportunities to build together on the combined richness of local knowledge and familiarity with global advances in theory, methodology and knowledge creation led to building a better collective understanding of global scientific challenges.

The capacity building benefits of the HIV Prevention for Rural Youth research programme focused on both individuals and Nigerian institutions. The project contributed in many ways and with various degrees of success to the strengthening of research capacities in Nigeria. Of major importance is the fact that the Nigerian team and staff members were exposed to the action research model which is not well understood and practiced in Nigeria to date. Building individual capacity to carry out action research among Nigerian research team members, which this project promoted, paved the way to curriculum improvement in social sciences and education and, ultimately, a transfer of knowledge to students who will become leaders and teachers themselves, thus ensuring the sustainability of the results

An additional component of the capacity building benefits of the research programme relates to the training of junior academics to play significant roles in the implementation of the project. Many junior academics in Nigeria lack the opportunity for further studies and collaborative research. It was viewed as necessary for this research project to include opportunities for staff training in research methodology, research report writing and project management. Training took different forms, from academic training leading to a degree, to short term training to acquire specific

skills knowledge, and mentoring. Consequently, junior academics in Nigeria who served as project staff increased their capacity for project management. They acquired the ability to write reports; gained knowledge in the use of interviewing and ethnographic survey, methodologies, in data analysis and in the preparation of presentations for a variety of stakeholder and academic audiences. In Canada, graduates and junior academics who worked on the project as research assistants gained experience in international, cross-cultural collaboration. Similar to their Nigerian counterparts, several contributed to and benefited from co-authorship of publications and presentations. Three of these Canadians also contributed to the training of their Nigerian peers in data management and analysis techniques and report writing, enhancing their own skills in cross-cultural training and collaboration.

The number of non-PhD-qualified staff in most Nigerian institutions is quite high by international standards. Holders of doctorate degrees are generally clustered at the higher staff levels, leaving a cohort of younger but lessqualified academics to do the bulk of teaching and even research. As the older generations are retiring from the system, it is this younger group of researchers, currently without doctoral-level qualifications, who are forced to fill the gaps that are being created. Boosting the numbers of doctorates within Nigerian academic institutions is obviously a major priority in the next few years 16, ¹⁷. This project contributed to the ongoing doctoral training of two of the junior academic project staff that embarked on their doctoral program in Nigeria and in the United States during the second year of its implementation. The research interest of these two young scholars has been stimulated by their participation in the implementation of the various aspects of the project.

Another important research capacity building benefit of the project relates to the empowerment of two categories of young Nigerian graduates. The first comprise fifty five Research Assistants who were trained in quantitative and qualitative data collection. Some of the Research Assistants secured appointments in the *Centre for Population and Environmental Development (CPED)* and in other Nigerian institutions on the basis of the skills

they acquired. The second group of young graduates empowered comprises forty graduate Youth Corps members who were trained to work in the target communities. These Youth Corps members graduated from a systematic training in sexuality and community mobilization strategies. The training was led by seasoned and professional personnel comprising of both team members and project staff. This made it possible for the Youth Corps members to make impacts in the ten communities to which they were posted With the enhanced capacity which the Youth Corps members acquired they started to spread the HIV Prevention for Rural Youth message to every household in their assigned communities through community meetings, churches, mosques, schools, market places, streets and in other occupational places. Some inhabitants of the communities invited the Youth Corps members to their homes to speak to them and their children just as the churches invited them to talk to the youth on how to live right and stay safe from the HIV virus. The Youth Corps members also visited schools to talk to the pupils on the invitation of their teachers. Thus, the empowered Youth Corps members became role models for most of the community members. The skills acquired by the Youth Corps members are being utilized in other situations and localities in which they find themselves after the completion of their national assignment.

As far as institutional capacity building is concerned, the current lack of resources in universities and research centres in Nigeria severely impedes all aspects of research. Projects can stall or even collapse when basic resources are not available, results cannot be properly disseminated, and it is generally difficult in such circumstances to carry any work forward into new funding phases. Lack of adequate institutional resources in the project partner institutions, particularly the University of Benin and the Centre for Population and Environmental Development (CPED), was a major challenge which had to be tackled at the beginning of the project. This entailed building the institutional capacity of the host institution, CPED, by providing improved research facilities such as computers, colour and black-and-white printers, scanner, laptop computers, projector and project screen, photo

cameras, loudspeakers, the furnishing of a project office and conference room and support for the running of a power generator. The support provided by the project to CPED has greatly improved the infrastructural capacity of the Centre which has enabled the centre to carry out other research projects. The institutional capacity of CPED was also enhanced in terms of the considerable experience gained in hosting the research collaboration between researchers from different academic fields, in particular interdisciplinary cooperation between humanities and social sciences and between institutions. Furthermore, the enhanced institutional capacity of CPED through the project contributed to CPED's selection as one of the 24 African research centres being supported under the Canadian International Development Research Centre (IDRC) Think Tank Initiative. It can be stated that the University of Benin and CPED have benefited from the action research project by developing international experience in academic cooperation. The experience has consolidated teaching and research in the area of HIV and sex education and has contributed to the development of new interests and concerns among Canadian and Nigerian researchers. Furthermore, CPED through its participation in this project also enhanced its skills in research administration in such areas as financial management, technology research ethics, etc. Finally, CPED enhanced its capability in outreach activities aimed at the general public through the service delivery activities carried out in the target communities.

The possibilities for women to develop research and professional skills and take on leadership roles is particularly limited in Nigeria where gender imbalance in education as well as in government institutions and leadership roles is rooted in a double standard that places women in dependency roles relative to men. IDRC has a strong policy of gender equity in project leadership and capacity building and the incorporation of gender analysis into research. HP4RY was enhanced by the opportunities presented by gender as an analytical component and in terms of implementation of the research process. Gender was explicitly considered in the composition of the research team members in Canada and Nigeria as

men and women from both countries comprised the team. Gender was also considered in the recruitment of the project staff and the recruitment of Research Assistants and Youth Corps members. In the target communities, female Research Assistants and Youth Corps members played significant roles in the delivery of services to both male and female members. Their presence was felt in the campaigns against HIV/AIDS. Thus the project had a positive effect on the ability of women to develop and practice research skills and contribute significantly to project output. This has affected and will continue to change the gender of research composition programmes community development activities in Nigeria.

Research, publishing and dissemination

Funding for field research has been a major constraint for researchers in Nigeria during the last four decades, as has funding for Canadians to conduct research in settings outside Canada. Nigerian researchers need a greater ownership and control over the capturing of the original data, particularly in relation to some of the major issues such as HIV/AIDS. By supporting field research elements HP4RY has contributed to development of a stronger Nigerian research base and to ensuring that some Nigerian researchers had access to the key problems or issues of research within Nigeria rather than allowing this to be controlled by better-resourced researchers from the North. For the junior researchers, the project provided a chance to undertake fieldwork in the context of practical methodological training and supervision. For both Nigerian and Canadian team members this project gave them access to a rich data set including ethnographic, survey and interview data. Unlike the situation in some North-South research partnership projects in which Southern researchers were used simply as 'data gatherers;' this project ensured the effective participation of Nigerian team members and project staff in field work with the associated ownership of the data so collected. The partnership and co-ownership contributed to analysis and interpretation of data that combined local knowledge and experience with the theoretical and

global research advances and contexts in which the Canadian partners were well versed.

Published papers are the expected outputs of most academic research; they are the means by which new knowledge and developments in research are communicated within and beyond the academic community. Many Nigerian scholars have problems publishing their work in reputable international journals. One of the publication criteria for advancement by researchers in Nigeria is precisely such international publication. The Canada-Nigeria research partnership particularly beneficial in this regard, because conscious effort was made to ensure that research results were published and disseminated. To this end, the project contributed to an enhanced integration of Nigerian team members into the international scientific community through increasing their capacity to produce articles suitable for presentation and publication in international, peer-reviewed venues. A number of strategies were initiated to deal with the challenges of preparation and dissemination of research results.

To compensate for the insufficiencies of local libraries and in access to the international. scientific literature, a massive literature review and annotation project was undertaken in Canada. Four graduate students located, reviewed and annotated over 1400 scientific articles related to the project. These were organized by topic and made available to all team and staff members to facilitate their own review of literature relevant to the publications and presentations they preparing. Two workshops/seminars were held in Nigeria that presented team members and project staff with the opportunity to submit aspects of the research output to critical discussion with academic, civil society and policy making colleagues. Presentations were also made at several international conferences in Europe, North America and elsewhere in Africa. These afforded team and staff members the opportunity not only for critical discussion and exchange but also for networking with researchers from countries.

Some of the main findings, conclusions and policy recommendations are being published in this special issue of the *African Journal of*

Reproductive Health and will be posted electronically both on the CPED and University of Windsor websites where they will be freely accessible to researchers, policy makers and implementers, development agencies, civil society and citizens around the world. All of these research outputs were undertaken through partnerships between Canadian and Nigerian team and staff members.

Influencing policy and service delivery

Nowhere is the value of research for development more striking than in its contribution to policy development – and ultimately to the programmes and services offered to the relevant population groups. The HIV Prevention for Rural Youth research project has generated new knowledge that builds on local insights which has the potential to contribute to the formulation of new policies and programmes and the adaptation of existing ones. The new ideas and understanding generated by the research partnership can eventually contribute to influencing the intellectual environments in which decisions regarding HIV prevention for youth in rural communities are made in Nigeria. Two major aspects in which the project influenced policy and service delivery can be outlined.

The first relates to the empowerment of Junior Secondary School teachers in thirty schools in Edo State. The teachers were selected from those teaching three core subjects (English Language, Basic/Integrated Science, Social Studies) and providing Guidance and Counselling with the intention of integrating and infusing the Family Life and HIV Education (FLHE) curriculum into their teaching and counselling. This was carried out across the three senatorial districts (Edo South. Edo Central and Edo North) of Edo State. Teachers took FLHE back to their schools and delivered lessons to the students through classroom delivery and the establishment of Anti-AIDS Clubs which they tagged "FLHE Clubs". The impact of the training was beneficial as the articles in this volume by Dlamini et al.18 and Arnold et al. 19 demonstrate. Students from Junior Secondary School grades 1-3 were also trained from each of the schools. These students were trained as peer educators to help in the messaging

of HIV prevention and in extra-curricular activities to help their mates and community members stay safe. The project trained over 100 subject and Guidance and Counselling teachers, 30 school principals and approximately 1000 students. Apart from the government teachers benefiting from this programme, community teachers who complement teaching in these schools have also benefited. Master trainers who were initially trained by Edo State Government Ministry of Education attended refresher courses as part of the HIV Prevention for Rural Youth project prior to carrying out training of teachers for FLHE. Remote schools which are rarely included in such initiatives have the HP4RY Project to thank for the opportunity for such training for the first time through the project. The training has empowered students in these schools to take up lead roles in the spread of HIV Prevention messaging and teachers now feel comfort-able to talk to students about sex, sexuality and HIV/AIDS.

The second component relates to the activities of the Youth Corps members to enhance the AIDS Competence in the target communities²⁰. Upon gaining the confidence of community members, the Youth Corps members embarked on forming what they tagged "core groups" of different age grades, the essence of which were to build the capacity of community members to create activities that would delay sexual initiation among the young ones (adolescent child), and also spread the message of HIV to places where the soles of their feet cannot reach and to neighbouring communities. Such groups bore names such as HP4RY Club, Abstinence Club, HIV Club, Zip-up Club, Faithful Club, etc. The empowered community-based core group members engaged in activities they felt would be beneficial to the members of the communities comprising the old and young. They staged drama on HIV/AIDS, pregnancies, unwanted/teenage parent-child communication, abuses and incest, etc. at open spaces in the target communities for members to come and watch. Community Chiefs, Elders, women, youth, and children came out to witness these activities. In some communities, the Youth Corps members also carried out vocational training for women and girls in their communities. This contributed to empowering the women and girls to carry out income generating activities, raising their self esteem, independence and autonomy in making life decisions, including those related to behaviours that place them at risk of acquiring HIV. A total of 180 graduated from this activity in one community and most of the beneficiaries have started using the skills acquired to generate income. Both of these programming initiatives – delivery of FLHE in Edo State schools and Youth Corps members working to enhance the AIDS Competence of rural communities – have been fully documented, making the models of programme delivery available to others. Although the research project was conducted in only 30 secondary schools and 10 communities, the documentation of the models and processes used in service delivery has the potential to improve and promote the HIV prevention and sex education for people living in other rural communities in Nigeria and elsewhere.

Challenges in the management of the research collaboration

There are obvious challenges facing North-South research partnerships and HIV Prevention for Rural Youth is no exception. Key challenges included: the weak institutional infrastructure and resources in Nigeria; security; time; working in poorly resourced multi-need communities; financial management; and differences in leadership cultures and models.

Weak Infrastructure and Resources in Nigeria

The weak institutional resources and infrastructure in Nigeria, specifically in CPED and at the University of Benin, presented a major challenge. This relates, in particular, to the provision of fundamental infra-structural facilities such as reliable electricity supply, adequate access to computers and the internet, and up-to-date libraries. It was in this context that the project had to deal with a number of challenges in order to ensure its successful implementation. One of these was the widespread physical dispersion of the members of the research team between and within Canada and Nigeria. The project team attempted to address the problem of dispersion, in part, by

using computer technology and the Internet. However, the poor levels of communication infrastructure in Nigeria proved a serious impediment to this plan. Access to the Internet in Benin City was particularly problematic both at CPED and the University of Benin because of poor electrical and communication infrastructure. In the second year of the project, CPED was able to improve internet facilities with support from the IDRC's Think Tank Initiative but performance remained erratic and generally below the situation in Canada. Inadequate internet connectivity proved an impediment in all aspects of the project. Important e-mails critical to decision-making were not always received. Transfer of documents using either email or designated websites was fraught with difficulties, delays, and often proved impossible. Accessing library resources provided by IDRC and the University of Windsor via internet or conducting literature searches was likewise impossible. Sharing information and ideas critical to decision making, data analysis and interpretation, knowledge translation. preparation of publications could not be done in real-time using internet. Neither could mentoring of Nigerian staff by Canadians to build research skills. Telephone communication helped in some regard, but here too connectivity was unreliable and erratic and, combined with high costs, was of limited feasibility. Poor internet connectivity constituted a major problem between Canadian and Nigerian team members. impeding collaboration and shared decision making, particularly between the Principal Investigators who were forced to communicate through telephone to discuss the various issues relating to project implementation. Although e-mail and the internet have been a boon to collaborative work. especially internationally, this was not the case for this project. E-mail and internet proved complex inappropriate conceptual for methodological discussions. It was in this context that monthly meetings of the Nigerian research team members and project staff were instituted. These meetings facilitated communication on project activities among team members and project staff in Nigeria but did not solve the problem of communication across countries. The challenges posed by the poor technological infrastructure in Nigeria, combined with the time, costs and security concerns associated with international travel proved a major challenge to working as a team. Most often Canadians communicated and worked with each other and Nigerians did the same. This contributed to a bifurcation in team identity, leading to thinking of a Canadian team and a Nigerian team, and in the distribution of workload across the two countries.

Inadequate and erratic internet connectivity also negatively affected capacity building. Project plans included capacity building of Nigerian research staff and team members through short courses delivered in Nigeria by Canadians team members, followed by supervision and mentoring during real-world project operations using daily Internet-assisted communication and information transfer. Although the short courses took place, it impossible to maintain connectivity to support supervision, mentoring and information transfer. Thus, for example, data analysis done in one country could not be transferred to the other for review and poor or nonexistent connectivity between Canadians and Nigerians impeded discussion of such analysis. As a result, capacity building for data analysis and interpretation among Nigerian partners did not reach the levels hoped for, leaving the more complex analyses in the hands of Canadian team members and graduate students.

The lack of adequate resources in Nigerian universities affected the effective participation of some Nigerian team members, especially with respect to the exceptionally low pay, rapid inflation, problems in the delivery of electricity and telephone service, minimal funding to carry out research, and the impact of the non convertibility of Nigeria's currency blocking their purchase of books, journals and computers from the North. These have combined to limit the ability of Nigerian researchers to participate fully in global debates and developments in research and policy. The poor pay of academics in Nigeria has led to the emergence of the consultancy culture which has negative consequences for research. Consultants presume that research is all about finding answers to discrete problems defined by a client. Since carrying out consultancy activities by academics in Nigeria entails payment of generally high consultancy fees, they prefer participating in

consultancy activities rather than basic research which may not attract any remuneration apart from the benefits of attending conferences to present papers and perhaps publishing research results. There is no doubt that the degree of active participation of the Nigerian team members was influenced by the fact that no remuneration or honoraria were paid.

Security Challenges

Although the project would have benefitted from increased face-to-face interaction among all team members and staff, security issues presented a challenge to travel to both Nigeria and Canada. Security advisories from the Canadian High Commission related to the presence of Canadians in Nigeria together with reports of kidnappings and violence were an ever-present concern for Canadian team members when considering trips to Nigeria. Special precautions were taken in selection of hotels, drivers, transport, and destinations for field observations that came at an elevated cost and limited participation of Canadians in activities in Nigeria. For Nigerians, travel to Canada was impeded by long delays and uncertainties with respect to obtaining visas and the possibility of not gaining entry to Canada even once a visa had been obtained. While this did not present an impediment to senior team members could document prior travel without 'incident,' junior academics and staff with less experience were most seriously affected. One staff member who finally obtained a visa after several attempts was held for questioning by Canadian immigration officials for several hours on his arrival in the country and threatened with return to Nigeria. Another staff member, scheduled to come to Canada for training in data management never obtained a visa, despite several attempts. These security challenges interfered both with collaboration across the two countries and also with capacity building since it proved extremely difficult to bring staff and less senior partners to Canada.

Time Challenges

For Canadian and Nigerian team members alike, finding time for this project, and particularly for working as part of a team, has been an enormous

challenge because of heavy academic workloads and numerous other obligations. This has affected the project's ability to meet some deadlines and to benefit from an active interchange collaboration among team members. Closely related to this was the attrition of team members. For example, one team member in Nigeria withdrew from participation as a result of a new appointment. Another took on additional administrative work at the university which severely limited her participation in HP4RY while a Canadian team member took on a prestigious and challenging position at another university which cut into the time she had available for the project. One of the CPED project staff who was trained in qualitative methods left to pursue a doctoral programme in the United States at a crucial time when qualitative data were being analysed, necessitating the transfer of analysis to Canada. The attenuated participation of some team members placed an added burden on others, particularly for project work which was unrewarded either financially or in career advancement and which, in fact, cut into either very limited personal and family time or time available for work that did contribute to professional/academic requirements or financial reward.

Working in Partnership with Rural Communities

An additional challenge was that of developing a model that would be a good fit with our beliefs and values as researchers and, at the same time, best address the needs and values of the people in the targeted rural communities. In keeping with the participatory action research framework of the project, this meant that we needed to engage key stakeholders, including teachers and people in the target communities, in active participation in addressing youth vulnerability to HIV. project achieved this through frequent interactions and feedback to the stakeholders in the target schools and communities. During the visits of team members and project staff to communities, community members identified several development challenges faced by their communities which they believed the project should address. Requests were made by peer educators and community members for T-Shirts, fliers, posters with inscriptions of HIV/AIDS, IEC materials, and places to hold meetings with youth. In addition, communities wanted condoms, HIV testing, primary health centres, boreholes, electricity, and road construction.

Although these were outside the bounds of the project budget, the project responded by forming partnerships with other organizations (GHAIN, Local Government Councils, and local health centres in other neighbouring communities) to provide services such as free HIV counseling and testing. Periodic newsletters provided IEC that was directly relevant to communities based on research results and Youth Corps experiences. In some of the target communities, the peer educators got together under the supervision of Youth Corps members to build Youth Friendly Centres. Vocational training for youth and women was initiated in some of the communities to give them a source of income. Finally, community members and peer educators were issued certificates of recognition for their participation and as awards for participation in competitive events.

Financial Management

The project posed considerable financial management challenges in both Nigeria and Canada. These relate largely to the reporting and accountability requirements of IDRC, fluctuations in the value of the Nigerian naira in relation to the Canadian dollar, to Nigeria being a cash economy, and to delays in the flow of funds.

A considerable proportion of the project expenditure was incurred in Nigeria and managed through the Finance Department of CPED. This entailed a relatively high frequency of day-to-day financial operation related to the high level of regular expenses to maintain the project in a cash economy. A11 expenditures required documentation and support with Financial reports and supporting documentation had to periodically be sent from CPED to the University of Windsor with combined Nigerian and Canadian reports sent on to IDRC. This arrangement presented three difficulties. First, it did not allow for the lengthy time lag usually provided between disbursement of advances to

project personnel for fieldwork operation and their retirement. In a totally cash economy all purchases and expenses (travel; accommodation in the field; food; field expenses; supplies; telephone cards; equipment rental, maintenance or repair; payment for services, etc.) must be paid 'up front,' in cash. This necessitates large advances to staff and the collection, retention and recording of a considerable number of receipts on the part of project staff and the Finance Department. The original procedure involved preparation of account supporting statements and documentation coincident with IDRC's reporting time frame, i.e. every 6 months. The second challenge related to reporting requirements. Sending scanned copies of receipts and payment vouchers proved to be a major problem due to their bulky nature against the background of allowable maximum size/bytes limits as well as the epileptic nature of internet connectivity in Nigeria. In Windsor, this mass of documents typically arrived in no predetermined order or sequence and often with critical information missing. Reconciliation of this massive documentation against ledgers financial statements produced many queries back and forth between Canada and Nigeria. These were often difficult to answer because of the expanse of time they covered. Repeated recalculation, adjustment, and revision, often reaching back over several months ultimately produced considerable delays in completing reports. The Finance Department at the University of Windsor was held responsible by IDRC for assuring funds had been spent consistent with contractual requirements and for checking and logging all relevant documentation. Money could not be transferred to Nigeria for the next time period until documentation was reconciled with account ledgers and summarizing reports. This posed the third challenge, delays in the flow of funds. Because of the complexity of the tasks involved, transfer of funds from Canada to Nigeria was often delayed until after most or all funds had been expended in Nigeria and before the University had received funds to cover the transfer. Thus, the original arrangement placed considerable financial burdens on both of the lead institutions.

Several attempts were made to improve the situation. Capacity building of the CPED Financial Officer was undertaken in two visits to Nigeria by the Canadian project accountant. An agreement was struck with Action Health Incorporated, a Lagos-based nongovernment agency and partner on the project, whose Finance Department used more advanced and appropriate accounting procedures, to train the CPED Finance Officer in the software and procedures used in their In addition, in an attempt to organization. eliminate the problems and delays related to the large quantities of information and documentation processed using a 6-month reporting system, account reconciliation and reporting was adjusted to a monthly schedule. The purpose was to make the workload of reconciliation more manageable and efficient, simplify the transfer documentation to Canada, and identify and correct any errors or problems in a timely manner. However, this change did not have the desired effect and instead posed additional challenges to the CPED Finance Department. In both Canada and Nigeria more time and resources needed to be allocated to financial management than originally envisioned. The project would have benefitted from having a certified accountant as Finance Officer as well as a full-time bookkeeper in Nigeria. Capacity building for the Nigerian finance staff would have benefited from time in Canada to become familiar with the accounting systems and requirements of IDRC. Financial management is an area that is not often given much attention in project planning and design. The challenges encountered in HP4RY illustrate the need to give full consideration and resources to the financial component of projects.

Models of Leadership and Collaboration

Perhaps the greatest challenge encountered on the project emanated from attempts to meld different models of collaboration and leadership. The model incorporated into the project design was grounded in principals of open, collaborative teamwork and close contact, communication, and sharing of responsibility, information and ideas on an ongoing basis. Hierarchical relationships are minimized in this model with all team members

and research staff, including principal side-by-side investigators, working (see diagrammatic representation in Appendix II). Openness and transparency about all project activities – both successful and unsuccessful – are central to the model with lines of communication and information sharing open among all project members. Workload is flexible, often over-flowing the bounds of job descriptions as team and staff members work collaboratively in close mentoring relationships to achieve project goals. The focus of attention and documentation is equally on results, outcomes, and the processes used to reach them.

Soon after commencement of the project it became apparent that a second model was preferred by some team members. This followed a more traditional, hierarchical form of project leadership with a division of responsibilities based on status or position on the project and a single leader or 'ship's captain.' Direction and instructions come 'from above,' are followed and rarely challenged based on the assumption that those who issue instructions are more knowledgeable and capable. Problems and difficulties rarely shared even communicated, but solved by those who encounter them. This model limits workloads to those formally prescribed regardless of skills or difficulties. The focus of attention documentation is on results and output with little attention and almost no documentation of processes.

There are benefits and disadvantages to each model. What is clear is that they do not meld easily. Because of strongly held preferences and experience, the Principal Investigators preferred and followed different models of leadership. In so far as team members and personnel spent their time and conducted their work primarily in one followed they different Difficulties arose, however, when work and decisions crossed between the two countries. This proved particularly challenging for staff and research assistants in Nigeria who worked on tasks that required input and decision making from both Canadian and Nigerian team members. In the realm of information sharing, for example, they were often conflicted over whether full disclosure of field events and activities – not only successes

but also difficulties, 'failures' and on-the-ground decisions - should be made, or whether only information specifically requested should be shared, or whether they should deal with field situations and report only the end results. Team members were challenged when, at times, they had to work following a model with which they were uncomfortable and which they felt and/or counterproductive. inappropriate The Principle Investigators also struggled with the two models reaching, at best, 'uneasy' compromises.

Meeting the Challenges

While success in meeting the challenges faced in this project must be credited primarily to the team members, staff and research assistants, it is important to acknowledge that a significant contribution was made to these successes by the lessons learned and early warnings that emanated from an annual process evaluation conducted over the course of HP4RY. Yearly visits were made to the primary project site in Nigeria and phone discussions held with Canadian partners by a project evaluator whose focus was on the process of implementation of all activities. Her detailed review of documentation and reports, visits to schools and communities, discussions with team members, staff and research assistants, and observation of work-in-progress were distilled into reports that proved of immense value. These reports regularly identified shortcomings as well as successes, adaptations that had been made to accommodate unanticipated challenges, and, perhaps most importantly, provided an 'early warning system' of areas where problems were beginning to surface. Reports were written in the spirit of honest and open critique. Although at times these critiques were difficult to hear, all project members consistently acknowledged that they accurately captured fact, mood, relationships, and activities. Some warnings were successfully acted on, averting potentially negative outcomes. Other warnings identified problems that proved beyond the ability and/or will of team or staff members to successfully overcome and, instead, were accommodated. What these evaluation reports invariably facilitated was increased awareness of how underlying, often ignored or taken-for-granted processes influence project work and outcomes.

Implications for future research partnerships

The considerable success and experiences derived from the implementation of this Canada-Nigeria research partnership on HIV Prevention for Rural Youth bring into focus a number of challenges which should be addressed in future North-South research collaborations in Nigeria and indeed other parts of Africa.

Research in Nigeria cannot depend perpetually on North-South partnership which is largely funded by organizations and governments based in the North. In order to guarantee adequate future funding for research, and ensure that national and institutional research cultures are developed, governments at the federal and state levels in Nigeria need to appreciate the value of research. There is the need for raising the consciousness of the Nigerian public and policy makers, both with respect to the value that the disciplines of social sciences and humanities bring to Nigerian society and the facilities required to underpin their roles in areas such as poverty reduction, socio-economic development and HIV prevention. Governments in Nigeria do not have a cohesive research policy and rarely acknowledge the potential of academicians in providing research results that could be used in policy development. This is particularly the case with respect to the social sciences as governments tend to see more immediate value in the technical solutions emerging from research in the physical, environmental and medical sciences, but less in outcomes of social science research. Participatory and multidisciplinary approaches are needed to inform research design, conduct research and disseminate results to policy-makers and communities benefiting from research.

While calling on policy makers in Nigeria to appreciate the value of research there is no doubt that donors will continue to play key roles in promoting research in Nigeria for many years to come as part of programmes designed to alleviate poverty, promote socio-economic development and address the challenges posed by HIV. Donors must demonstrate their commitment to supporting a sustainable research culture in Nigeria. Often donors funding specific research projects, and

attempting to measure the relative success of their programmes, focus, understandably, on the initial and end stages of research as reflected in the outcomes that a project delivers. Yet for long-term research capacity to be developed and sustained in a country such as Nigeria it is clear that donors need to take a much greater interest in the processes and mechanics of the research process itself, to understand why things do and do not happen, and the things that frustrate research in Nigeria. Donors need to undertake substantive assessments of the resource base accessible to researchers and develop a stronger understanding of the cultures and processes of research in Nigerian research institutions, particularly the universities and key research centres. This would allow funding to be deployed more effectively, and would provide a way to acknowledge those areas requiring additional support. It is essential that donors should make funding flexible, and ensure that it is delivered through systems which help to maintain flows of funding. Such a system of funding would allow problems to be addressed swiftly, and ought to therefore reduce the risk of projects stalling or resulting in premature termination. In view of the unpredictability of the socio-economic environment in which research is carried out in Nigeria, donors should consider how additional contingency funding could be provided, to account for needs that arise during the course of a project, but which may reasonably have been unforeseen at the outset.

Currently most Nigerian universities lack proper career structures for junior academics with no clear postdoctoral route. Donors towards research in Nigeria should work to encourage and facilitate opportunities which enable junior researchers to benefit from the experience of senior colleagues while also providing experienced staff with a way of reinvesting their knowledge and skills for the future. Mentoring has many benefits beyond research training; it can help to induct researchers into academic networks and provide access to new collaborators, assist junior researchers to publish their work, and develop skills in establishing and managing projects and securing funding²¹.

One of the major constraints to research in Nigeria, as noted earlier in this paper, relates to the

fact that salaries are so low that academics, like other staff, must find ways to generate additional income if they are to survive. If universities and donors are to encourage academics to channel their energies into research and work to overcome the challenge of poor remuneration, then incentives are needed. Research activity in Nigeria, if it is to sustained, must be rewarded. This is particularly true in the case of collaborative work with relatively well-paid Northern counterparts. In order to avoid diversion of effort towards the often financially attractive options of consultancy, donors should work with universities and other research centres to review the conditions currently attached to research grants and consider financial mechanisms such as awards or honoraria which would reward and encourage Nigerian academics' participation in research. For Canadian academics, the primary impediment to partnering on projects with colleagues in LMICs is time. Although well paid, Canadian academics. particularly those with active research agendas, carry heavy workloads and spend far more than the normative 40-hours/week that is considered acceptable in Canada. Partnering on projects that require considerable travel time, on which they informally or formally carry responsibilities for capacity building as well as research, and must supplement the insufficiencies that plague their LMIC partners, adds considerably to these time burdens. These additional responsibilities and expectations are neither rewarded nor accommodated by either funding agencies or their institutions. For Canadians to fully participate in North-South collaborations the time required must be recognized and accommodated by donors and academic institutions alike.

Collaboration, to be of real value, must be based on a true and equal partnership^{22, 23, 24}. This is important within the context of individual projects, and for the long term sustainability of research. Northern researchers entering into partnership with Nigerian colleagues must fully appreciate the constraints under which academics in Nigeria work, and be genuinely prepared to work in support of Nigerian partner needs and priorities. Similarly, Nigerians must fully appreciate the constraints under which academics in Canada work, and be prepared to take on a full

share of responsibility and workload in all aspects of projects. It is easy for Northern partners to assume lead roles and when money flows from North to South there is also a tendency for decisions to flow the same way. If donor support for research in Nigeria through collaboration is to make the required impact, it is important to ensure that Nigerian colleagues are fully involved at all stages of project design, and that this be reflected in the systems of application and opportunities for regular meetings between participants to assess progress and decide common ways forward as was done in the HIV Prevention for Rural Youth project reported in this journal. Finally, it needs to be noted, once more, that the value of research depends on the extent to which knowledge can be disseminated to those who are ultimately intended to benefit from it. In some fields, or at some levels, research may be of primary interest only to other academics, but in other areas it may have particular policy implications of interest to government, or valuable messages for the wider public. The value of research will need to be widely recognized if it is to secure sufficient and continued support from national budgets. Researchers are well placed to communicate knowledge to their peers, but potentially less experienced at communicating with other key groups. If social research is to receive increased support from policy makers in Nigeria, the communication of social science knowledge is important and requires necessary support ²⁵.

Conclusions

Conscious of past shortcomings in North/South research relationships, the Canada-Nigeria research partnership on HIV Prevention for Rural Youth devised principles and procedures designed to lead to more equitable, responsive and sustainable implementation of the research project. Although implementing the project has been challenging and not all challenges have been met as well as they might have been one thing that has become clear is the urgent need to address not only the capacity of the South to fully participate in research, but also the capacity of the North to engage in meaningful collaborations with the South in development research. In the longer term,

there is need to address systematically the obstacles to development research in both the **APPENDIX I:**

HIV PREVENTION FOR RURAL YOUTH: MOBILIZING NIGERIAN SCHOOLS AND COMMUNITIES

Team members	
Co-Principal Investigators	Prof. Eleanor Maticka-Tyndale, University of Windsor, Canada
	Prof. Emer. Andrew Onokerhoraye, University of Benin and CPED, Nigeria
	Ms. Adenike Esiet, AHI, Nigeria
Co-Investigators	Dr. Uzo Anucha, York University, Canada
	Dr. Robert Arnold, University of Windsor, Canada
	Dr. Nombuso Dlamini, York University, Canada
	Prof. Kokunre Eghafona, University of Benin, Nigeria
	Dr. Isaac Luginaah, University of Western Ontario, Canada
	Prof. Friday Okonofua (to 06/2010), University of Benin, Nigeria
	Prof. Felicia Okoro, University of Benin, Nigeria
	Dr. Francisca Omorodion, University of Windsor, Canada
	Dr. Uyi Oni Ekhosuehi, Edo State Ministry of Education
Staff: Nigeria (full-time)	Johnson Dudu, Project Administrator
	Emmanuel Ideh, Accountant
	Solomon Oshodin, (to 01/2012) Procurement
	Job Eronmhonsele, Documentation and Information Technology
	Ese Akpede, Field Coordinator
	Eloho Tobrise Communication Coordinator (to 08/2010)
	Mercy Erhi Makpor Communication Coordinator (from 01/2011) 01
Canada (part-time)	Dr. Eric Tenkorang, post-doctoral research fellow
	Dan Holland, database manager
	Sanford Tyndale, accountant
	Karen Metcalfe, data analysis and documentation
Part-Time/Occasional	
Research Assistants	Nigeria: 52 in total
	40 Youth Corps members
	Canada: 6 in total (literature review and data analysis assistance)
Evaluator	Dr. Janet Wildish

North and the South. We reiterate the need for more explicit recognition of the essential role of higher education and of intellectuals in sustainable development in the South as well as in the North. In our mind, this recognition begins by supporting, financially and otherwise, higher education teachers and researchers as well as university libraries in the South. It should also entail attaching a higher value to international cooperation in the mission of universities and donors in the North. Long-term qualitative outcomes such as those achieved in this project prove that effective North–South cooperation in

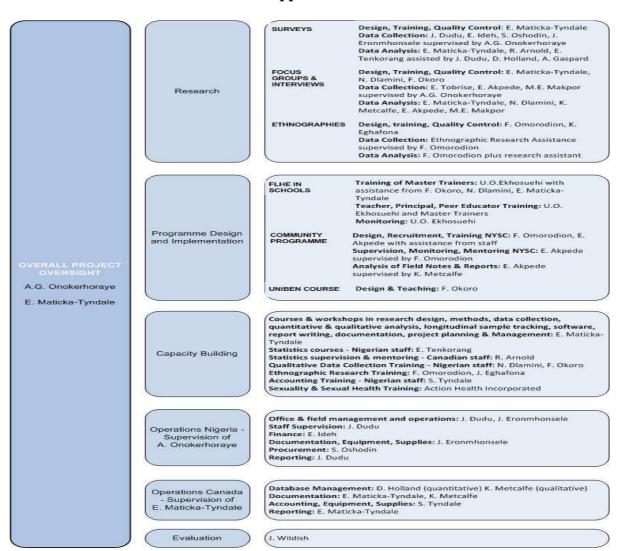
research is an essential tool for development and poverty reduction in the countries of the South.

Acknowledgements

This work was carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada, on behalf of the Global Health Research Initiative (www.ghri.ca). We thank the staff and research assistants at the Centre for Population and Environmental Development, Nigeria, Action Health Incorporated, Nigeria, the Edo State Ministry of Education, the principals,

teachers and students in participating schools and participating communities. the community leaders and residents in

Appendix II



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