

Final Case Study Report

Capacity Development for Research: Strategic Evaluation

An Enduring Partnership:
*Organizational Case Study of Université
Cheikh Anta Diop (UCAD)*

by

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A c r o n y m s

ACACIA	Communities and the Information Society in Africa
ACBF	African Capacity Building Foundation
AUF	<i>Agence universitaire de la Francophonie</i> (University agency for Francophonie)
CADU	Cheikh Anta Diop University
CAMES	<i>Conseil Africain et Malgache pour l'Enseignement Supérieur</i> (African-Malagasy council for higher education)
CIDA	Canadian International Development Agency
CONFEMEN	<i>Conférence des Ministres de l'Éducation ayant le Français en Partage</i> (Conference of ministers of education with French in common)
CREA	<i>Centre de recherches économiques appliquées</i> (Centre for applied economic research)
CRES	<i>Consortium pour la recherche économique et sociale</i> (Consortium for economic and social research)
ECOHEALTH	Ecosystem Approach to Health
ECOSSEN	<i>Écographie du Sénégal Subsaharien</i> (Ecography of sub-Saharan Africa)
ERNWACA	Educational Research Network for West and Central Africa
ESARO	Eastern and Southern Africa Regional Office
FASEG	<i>Faculté des Sciences Économiques et de Gestion</i> (Faculty of economic and management science)
FASTEF	<i>Faculté des Sciences et Technologies de l'Éducation et de la Formation</i> (Faculty of education)
FIRST	<i>Fonds d'impulsion de la Recherche Scientifique et Technologique</i> (Science and technology research fund)
GAD	Grants Administration Division
GDP	Gross Domestic Product
GGP	Globalization, Growth and Poverty
GIS	Geographical Information System
HIV-AIDS	Human Immunodeficiency Virus – Acquired Immune Deficiency Syndrome
ICARDA	International Center for Agricultural Research in the Dry Areas
ICT	Information and Communication Technology
IDRC	International Development Research Centre
IFAN	Institut Français d'Afrique Noire
IPS	Innovation, Policy and Science

LMD	<i>Licence Maîtrise Doctorat</i> (baccalaureate, master's, doctorate)
MIMAP	Micro Impacts of Macroeconomic Adjustment Policies
HMI	Human-Machine Interface
NEPAD	New Partnership for Africa's Development
NGO	Non Governmental Organization
PBDD	Partnership and Business Development Division
PhD	Doctorate
RAF	ESARO Activity Fund
SCAULWA	Standing Conference of African University Libraries Western Area
SEP	Social and Economic Policy
SISERA	Secretariat for Institutional Support for Economic Research in Africa
SMS	System Management Server
TEC	Trade, Employment and Competitiveness
TOR	Terms of Reference
UNESCO	United Nations Educational, Scientific and Cultural Organization
UQAM	Université du Québec à Montréal
WAF/MENA	West Africa, North Africa and Middle East
WARO	Regional Office for West and Central Africa
WRC	Women's Rights and Citizenship
XOF	West African CFA franc

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Executive Summary

Cheikh Anta Diop University (CADU) is one of the largest universities in West Africa. For over 15 years, it has been a partner of the International Development Research Centre (IDRC), which, during that time, has invested nearly CAD\$9 million in CADU. The present case study focusing on CADU is one of a group of six that will help IDRC evaluate the methods by which it seeks to develop the organizational research capacities of its partners.

The aim of the study was to evaluate the impact of IDRC actions on CADU's organizational research capacity, and to encourage reflection on how IDRC could improve its contribution to CADU.

To perform the study, a large amount of data was collected by analyzing the literature on capacity building, and by holding a series of interviews both by telephone and in person during a visit to the Regional Office for West and Central Africa (WARO). Twenty projects were reviewed that were selected to give a representative sample of the different budgetary and sectoral categories.

Study Findings

The research environment

An examination of the three types of factors that can influence the organizational performance of an institution, namely (1) environment (the external context), (2) motivation (incentives, internal culture, history, etc.) and (3) capacity (human, financial, programmatic, technological resources, etc.), led us to the following conclusions on CADU's research capacity:

CADU is subject to constraints related to the difficult environment for research on the African continent. The university sector is under-funded and increasingly neglected by governments.

Moreover, two significant external factors restrict the potential for research at CADU. First, the university is governed by the framework established by the *Conseil Africain et Malgache pour l'Enseignement Supérieur* (CAMES), which encourages basic research to the detriment of applied research. Second, the fragmentation of the research sector in Senegal limits its effectiveness.

Internally, there are other problems. Research is inefficiently organized at CADU (too decentralized, teachers overburdened), with inadequate infrastructure (overcrowded classes, obsolete laboratories). These problems have led to an ongoing exodus of Senegalese researchers abroad.

Relations between IDRC and CADU

IDRC's regional bureau in West Africa, WARO, is literally across the street from CADU. This geographical proximity, the presence of former CADU researchers in WARO, the extent of IDRC's financial support, and better coordination between the two institutions thanks to CADU's Cooperation Office, have given a solid foundation to the relationship between the two organizations.

Though CADU's need for funding is the basis for its cooperation with IDRC, the Centre's thorough understanding of the country and of CADU's researchers has done much to strengthen this partnership. It has for example allowed the Centre to collaborate with CADU in identifying the country's development problems. IDRC's focus on finding local solutions to those problems is highly appreciated by CADU and the government officials we met.

Additionally, although CADU aligns its programs with those of IDRC, this has never felt like a constraint to government officials or CADU's researchers. For IDRC takes the country's priorities into account and makes no attempt to restrict local research.

Finally, both CADU and the officials we met underscored and praised the frequency with which IDRC projects support research capacity building at CADU.

IDRC capacity building interventions at CADU

Depending on their objectives, IDRC projects can have an impact at three levels. Their mission could be: (1) to strengthen the capabilities of one or more researchers, focusing thus on individuals; (2) to strengthen an organizational unit of CADU; or (3) to strengthen the institutional context in which CADU operates.

Since the higher levels involve interventions of increasing complexity, generally speaking, IDRC has undertaken a large number of initiatives focused on individuals, its involvement in organizational and institutional capacity building being a more recent development.

More recently, thus, IDRC has sought a better match between supply and demand for research, the goal being to foster a national research culture and at the same time increase CADU's relevance. Several projects have successfully linked up CADU's supply with the needs of Senegalese decision-makers.

To accomplish its objectives, IDRC has deployed a variety of approaches and many different tools, including access to resource persons, information sessions, seminars and workshops, support for centres of excellence, support for CADU's network, scholarships, improvements to equipment and infrastructure, assistance with the publication and dissemination of research, help for pressure groups supporting research, and support for documentary resources.

Moreover, CADU and WARO emphasize the fact that IDRC has steadfastly followed the guiding principles found in good practices for aid effectiveness (*Paris Declaration, 2005*).

The three main roles that IDRC has played in its projects with CADU are that of financial partner, that of technical assistant and that of liaison with the university's external partners.

Performance and Continuity

IDRC projects have had many positive benefits. These include the acquisition of knowledge, skills and know-how; increased research and publications; greater visibility and renown for

researchers and their work on the international stage; expanded professional horizons for researchers, thanks to projects conducted with governmental bodies or development agencies; greater networking opportunities; and easier access to funding.

Countering these positive results have been the brain drain (of the very professors who had benefited from IDRC assistance) and the difficulty of turning research results into action.

In terms of organizational capacity building, IDRC has invested in projects of sufficient size (bigger budget and longer duration) and with explicit enough objectives, that positive outcomes can be expected in future.

These very encouraging results stem primarily from the following factors: the geographical proximity mentioned earlier, IDRC's great visibility and its key role as CADU's principal financial partner for research, and a political climate that is more favourable to research than in various other countries in the region.

Effect on IDRC of its relationship with CADU, and relations between CADU and IDRC

The relationship between the two partners is a very good one, allowing both to learn from each other, and making it possible for IDRC to develop a deeper understanding of development problems in Senegal.

Through the work it has undertaken with CADU, IDRC has been able to differentiate between the success of a given project and the success of its research capacity building. For the success or failure of the one does not necessarily imply success or failure for the other.

Thoughts for the Future

Generally speaking, our respondents expressed appreciation for IDRC's work, urging it to continue in the same direction while taking into account the following observations:

Capitalize on strengths, be aware of weaknesses

Among its strengths, IDRC can count on its great credibility with Senegalese stakeholders, swift and simple project approval mechanisms, good interactions between IDRC project managers and CADU researchers, and the sensitivity of its managers to the gender issue.

Among the weaknesses, CADU researchers noted the failure to circulate project evaluations, and the fact that they never really knew (or understood) IDRC's organizational objectives with regard to research capacity building.

Thoughts on capacity building activities for researchers

Aside from increasing the budget for project funding, to avoid the risk of wasting resources, there seems to be a need to train researchers in some important related skills, one being project management.

Additionally, to mitigate CADU's linguistic isolation from Anglophone universities and from research published in English, it would make sense to encourage researchers to learn English (e.g. through travel bursaries and by developing inter-university networks), and to fund the translation into English of CADU research papers.

As well, to further the development of the research culture at CADU, IDRC projects could expose researchers to educational models in which research is more highly valued, for example through bursaries to conduct research at partner universities, which would increase the mobility of CADU researchers.

Thoughts on research capacity building at the organizational level

Capacity building at the organizational level is indispensable, for it is the condition for ensuring the sustainability of interventions at the individual level. Some enabling elements merit emphasis: is the relationship between organizational structures and capacity building methods explored sufficiently when projects are being prepared?

The most fruitful capacity building projects have devoted at least a part of their capacity building efforts to management, e.g. leadership, strategic planning, financial management, etc.

IDRC should also focus on supporting organizational units when they undergo transitions, particularly changes of staff or leadership, and support for the new team to ensure the units are not weakened.

To promote the sharing of knowledge and resources, encouragement and support should be given to networks linking the different research units at CADU.

Lastly, if funding for certain projects were provided for a longer period than the annual cycle, implementation could proceed at a more realistic pace.

Thoughts on research capacity building at the institutional level

IDRC must continue to give priority to local issues, over external ones, in order to avoid an identity crisis in research circles at CADU.

There is also a need to work towards a better match between the supply of research and demand for it.

Other considerations

Thorough knowledge of the local context increases the probability of capacity building projects being successful, and leads to harmonized terminologies, which is also desirable.

1. Introduction

1.1 Study Context

In 2006, the Evaluation Unit of the International Development Research Centre (IDRC) launched a four-phase review of the nature and quality of the approaches used by IDRC for research capacity building. The first three phases produced a clearer understanding of the notion of “capacity development”¹, a catalogue of the organizational partners of IDRC that have benefited from such initiatives, a preliminary typology to assist IDRC and its partners in conceptualizing, planning, monitoring and evaluating capacity development, and a list of “good practices” that IDRC and its staff consider essential in developing their partners’ organizational capacity for research.

The fourth and last phase of this process began in July 2007. It consists of in-depth analyses of six groups of IDRC initiatives with as many partners². A team composed of Dr Marie-Hélène Adrien and Martin Carrier was assigned the case study of Cheikh Anta Diop University (CADU), their objectives being the same as those of the other five studies: to help IDRC identify changes (at the individual, organizational and network levels) that can be attributed to its interventions in these organizations, and to distinguish successful approaches from those whose impact has been more limited.

CADU was a natural choice for this study, for its partnership with IDRC goes back over 15 years, and the two organizations have developed close ties through a long series of research projects on development. CADU is one of the oldest and most respected universities in West Africa. Created in 1957, it was inaugurated in 1959 (under the name Dakar University) and now numbers seven faculties and over 37,000 students³.

Rather than an evaluation of IDRC projects at CADU, this study, as required by the Terms of Reference presented in Appendix I, is an examination at once retrospective and prospective of research capacity building at CADU. It is our hope that the study’s protagonists will use it in its reflexion on how to pursue the common objective of stimulating and strengthening research at CADU using the best means available. The study is laid out as follows: following this Introduction, section 2 presents our methodology; section 3 relates the history of CADU and the main characteristics of the relationship between CADU and IDRC; section 4 outlines our key findings; section 5 is a series of thoughts for the future; and section 6 is the Conclusion.

¹ For IDRC, capacity development is the process by which individuals, groups, organizations, institutions and societies increase their ability to identify and analyze development challenges, and to conduct, manage, and communicate research that addresses these challenges over time and in a sustainable manner. - Adapted from “IDRC-Supported Capacity Building: Developing a Framework for Capturing Capacity Changes” by Stephanie Neilson and Charles Lusthaus, February 2007.

² 1 – Makere University (Uganda); 2 - Cheikh Anta Diop University (Senegal); 3 - Peru Economic and Social Research Consortium (Peru); 4 – ICARDA (Syria); 5 – Association for Progressive Communications (South Africa); 6 – The Government of Cambodia.

³ For 2004, the number of registered students listed by UNESCO was 37,192. No figures on student population are given on the official web site of CADU. See <http://portal.unesco.org/education/en/files/55624/11999793915SENEGAL.pdf/SENEGAL.pdf>

2. Methodology

A common framework for the six case studies

To stimulate comparative analysis, the six case studies are based on the same framework and similar themes, of which the latter are broken down into research questions, as shown in the table presented in Appendix II.

A plural methodology

Carrying out this work has required a complementary assortment of methodological approaches applied in parallel. We began by making a list of theoretical and general works on African universities and their research capacity, on CADU, and on the projects specific to our sample. The complete bibliography is given in Appendix V. To that were added extensive reading on organizational capacity building and an exploration of web sites suggested by our respondents. A large part of the research consisted in interviews conducted at IDRC headquarters or at the Regional Office for West and Central Africa (WARO), which gave us a good grasp of the perspectives of project managers, senior management at CADU and CADU faculty and research staff; we also met with governmental and civil partners of CADU and IDRC in Senegal. The complete list of those who contributed to this study by telephone or in person may be found in Appendix VI; we are grateful to all for their patience and the time and attention they gave us.

Twenty projects for a varied sample

The corpus of projects examined by our team includes initiatives conducted over a period of more than 15 years, with budgets ranging from a few thousand dollars to several hundred thousand dollars. Moreover, the interventions selected were in sectors ranging from economy and health to information and communications technology (ICT), representing a wide array of approaches to research capacity building. The complete list of the projects we studied is presented in Appendix IV.

3. CADU and IDRC

CADU, the leading university in West Africa

The history of CADU begins in 1918 with the creation of an African school of medicine. There followed a succession of schools, notably the *Institut Français d'Afrique Noire* (IFAN) and other schools of higher education that were academically attached to Bordeaux University, under what in 1950 was called the *Institut des Hautes Études de Dakar*. The University of Dakar was established in 1957 and officially inaugurated in 1959. In 1987, its name was changed to what it is at present, Cheikh Anta Diop University of Dakar. Since 1994 CADU has gone through a number of important reforms, including the pedagogical reform as a result of the *Concertation Nationale sur l'Enseignement Supérieur*; the creation of the faculty of economic and management science (*Faculté des Sciences Économiques et de Gestion – FASEG*) in 1994; the baccalaureate/master's/doctorate reform (*licence/maîtrise/doctorat – LMD*) in 2003; the creation of the faculty of education (*Faculté des Sciences et Technologies de l'Éducation et de la Formation – FASTEF*) in 2004; and the doctoral studies reform in 2005.

Today, CADU possesses an extensive network of faculties, institutes, centres and schools. It has six independent faculties, five national colleges for professional training, and seven teaching and research institutes. Its main educational fields are medicine, science and technology, letters and human sciences, French language and renewable energies.

CADU has concluded cooperation agreements with universities in Europe, the Americas and Asia but, more recently, it has emphasized South-South cooperation. It receives funding from the Senegalese government and from the private sector, though not as much from the latter as is needed. CADU is now seeking ways to strengthen the relevance and usefulness of the research it conducts, and to curb the brain drain phenomenon. To this end, the university is planning a number of major projects, including a *Centre de Mesure* and a *Centre de Diagnostic et Polyclinique internationale*. The first is intended to foster tighter links between university research and the business world, the second to restore Dakar to its rightful position in Africa in the field of medicine.

History of the CADU-IDRC partnership

It is hardly surprising that IDRC should decide to partner with a university whose influence extends well beyond the boundaries of Senegal. Over the last 15 years IDRC has invested CAD\$8.3 million (about 3,690,736,274.63 XOF) in CADU projects, the budgets of which have ranged from CAD\$5,320 (2,365,538.62 XOF) to CAD\$803,285 (about 357,268,856.10 XOF), as shown in Appendix III. As mentioned by a number of respondents, in matters of research, IDRC is CADU's most important partner, both historically and at present.

CADU is keenly appreciative of the swiftness of IDRC's procedures and contractual mechanisms, in particular its approach toward research support. As one CADU researcher told us, and his colleagues were of the same opinion, IDRC's approach can be described as "applied research on development problems, focusing on locally-determined needs to encourage capacity building nationally".

During our visit to Dakar, both CADU and IDRC indicated the latter's importance as a partner of the university. In this respect, as a number of respondents noted,

"It is a winning partnership because on the one hand, when it comes to doing projects in West Africa, CADU is a key institution for IDRC, while on the other hand, we appreciate the latitude IDRC gives researchers to choose their projects."

CADU respondent

IDRC is CADU's most important partner in terms of support for research, despite the fact that, overall, France is the university's biggest financial partner.

The close relationship between IDRC and CADU is attributed by many, at least in part, to geographical proximity, since the

offices of IDRC's West Africa bureau (WARO) are located just across the street from the university. A certain communion of minds has arisen, fostered by informal exchanges such as access to WARO's documentary resources by CADU students and staff, and by the presence of former CADU students and professors among WARO personnel.

"CADU is not just a partner in the work we do, it is a natural interlocutor, since many of us have worked there as professors or researchers."

Project manager – WARO

4. Study Findings

Here we begin our analysis of the data we collected, structuring our reflections in accordance with the themes set out in Appendix II.

4.1 Development Research at CADU

Development research at CADU: some definitions

It is only quite recently that a concern for research has emerged at CADU. The successive directors of the institution have generally been preoccupied with teaching to the detriment of research, despite the fact that the latter is normally a university's first purpose, that which sets it apart from other educational institutions.

In his mission statement, CADU's current President lists research among the university's priorities, and describes its functions as including the acquisition, construction and validation of scientific knowledge; the dissemination of scientific culture, Senegalese culture in general and professional ethics; enhancement of the cultural heritage; the professional development of teachers and the improvement of course content; and furthering the influence of CADU with the volume and quality of its scientific contribution and by maximizing its social utility.

These elements correspond fairly well with three important functions of universities: the education of rising generations; the creation and dissemination of knowledge through research and publication; and a contribution to society through the broader effects of both research and teaching. The President's mission statement is in line with the conceptual schema proposed by Anne Bernard (see sidebar).

The people we met in Senegal spoke in much the same terms as Bernard, defining research capacity as follows:

- ability to conduct research projects (e.g. having the staff or infrastructure required);
- ability to manage research projects (planning, monitoring and evaluating research, and administering research projects);
- ability to communicate and disseminate research results, having therefore set up the necessary communication networks;
- ability to generate sufficient resources to conduct research (grants, partnerships, etc.);
- ability on the part of the university to continue to undertake research year after year, while striving to make research relevant to society;
- ability to influence society through the research produced.

Research capacity includes capabilities for:

- Conducting research
- Conceiving, generating and sustaining research
- Managing research
- Using/applying research outcomes in policy and/or practice

Anne Bernard, 2000 ⁴

We decided to incorporate these six characteristics into the model of organizational performance that was developed by IDRC in collaboration with Universalia ⁶, in which the performance of an organization is subject to the influence of three categories of factors: environment (external context), motivation (incentives, internal culture, history, etc.) and capacity (human resources, financial, programmatic, technological, etc.). This representation is of course imperfect, because it treats the university as a homogeneous entity, whereas it is generally agreed that a university should be seen as a group of flexibly interconnected structures brought together by the university's overarching mission. But to enable classification of "the university" among other types of organizations, we associate it with what Henry Mintzberg calls a *professional bureaucracy*, one that while being structured around a central axis, is surprisingly independent in its departmental structures, and is characterized by authority relationships based not only on hierarchy but also on expertise.

The professional bureaucracy relies for coordination on the standardization of skills and its associated parameters such as design, training and indoctrination. In professional bureaucracy-type structures, duly trained and indoctrinated specialists – professionals – are hired for the operating core, and then considerable control over their work is given to them. Most of the necessary coordination between the operating professionals is handled by the standardization of skills and knowledge – especially by what they have learned to expect from their colleagues. [...] The professional bureaucracy emphasizes authority of a professional nature or in other words "the power of expertise".

Viewing CADU then for practical reasons as an example of a professional bureaucracy, we found that a useful way to represent the major influences on its research capacity is as shown in Table 4.1.

At the heart of the model are the six characteristics considered essential to research capacity. The three overlapping circles combine the factors that according to our respondents affect research capacity at CADU. Some factors, like those listed under External environment, are far from unique to CADU, since they affect African universities in general; in contrast, factors listed under Capacity and Motivation are more specific to CADU. Note that despite the number of negative factors ("-"), this portrait of the research situation at CADU does include some encouraging elements ("+").

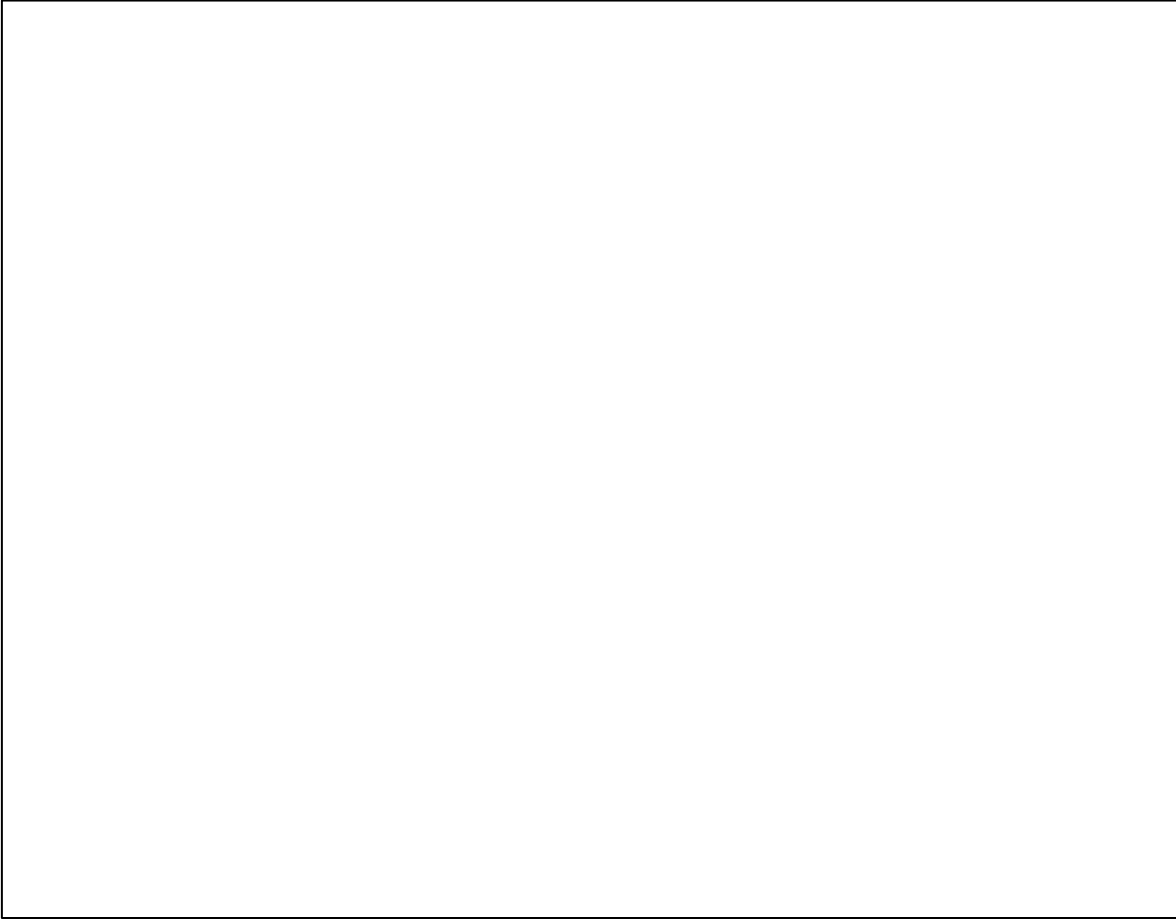
We should point out that, for the most part, the factors listed are common to all Francophone universities in Africa. In many cases, CADU is less affected than its sister institutions by problems that are far more dramatic in the poorest countries of the sub-region.

Table 4.1 Research Capacity at CADU – Strengths and Weaknesses

⁴ Bernard, A. *Mapping Capacity Development in IDRC*. IDRC, 2000

⁵ Mintzberg, H., Quinn, J.B. *The Strategy Process: Concepts, Contexts, Cases*. Prentice Hall, 1991

⁶ Lusthaus C., Adrien M.H., Anderson G., Carden, F. *Améliorer la performance organisationnelle – Manuel d'auto-évaluation*. CRDI, 1999



4.2 Research Environment

A continent little inclined to support research

In Africa, most of our respondents mentioned, a university's capacity for research depends on the presence of a combination of factors, including competent researchers, adequate infrastructure and resources (and access to them), time available for research, financial security, the absence of external pressures that could threaten researchers' independence, the existence and respect of a code of research, and the freedom and ability to criticize.

At present, research capacity in African universities is being held back by numerous factors, including the gradual withdrawal of the state from higher education, the uncritical adoption of theories and methodologies developed abroad, the absence or inadequacy of exchanges with academics in other countries, financial insecurity, inadequate infrastructure, and financial and legal obstacles to obtaining information. Quoted in the sidebar, an in-depth UNESCO investigation into research in Africa showed that it faces an array of forces that are at times complementary but very often opposed.

Research is confronted with seven binomials corresponding to opposing demands, [...] namely globalization versus national context, applied research versus basic research, accountability versus greater independence, competition versus collaboration, public sector versus private sector, English versus other languages and intellectual property versus intellectual philanthropy⁷.

The Senegalese researchers we met were unanimous in acknowledging the difficult environment for research, observing that it had been noted more than a quarter of a century ago with no significant improvement since. Indeed, in 1980 in Lagos the countries of Africa signed a memorandum of understanding in which they pledged to devote 1% of their Gross Domestic Product (GDP) to research. Application of this plan has, unfortunately, been spotty at best. Following the Ministerial Conference of the New Partnership for Africa's Development (NEPAD) in Johannesburg in 2003⁸, the governments renewed their commitment to implement the Lagos Plan, for only the Seychelles Islands and South Africa had managed to live up to it.

Up until 2004, thus for the period in which the projects we examined took place, university research in Senegal suffered from the same problems that are chronic throughout the continent, problems that one does encounter in certain Northern universities but that in Senegal are exacerbated by poverty.

While CADU also suffers from that unfavourable context, our respondents – researchers, government officials and WARO project managers – pointed out that certain factors in particular act to limit research capacity at CADU, some of them being beyond its control, others having to do with its internal culture or structure.

4.2.1 External Factors

The CAMES straitjacket

One of the primary external factors often cited is the framework imposed by the *Conseil Africain et Malgache pour l'Enseignement Supérieur* (CAMES). Unlike English-language universities, CADU and its sister French-

"We often have to make critical choices just to get ahead. How can we motivate researchers to turn toward development research when their entire academic career is determined by CAMES requirements? It's a structure that creates interregional harmonization but stifles innovation in development research."

A teacher at CADU

⁷ Analytical Review of the Colloquium on Research & Higher Education Policy: Universities as Centers of Research and Knowledge Creation: An Endangered Species? UNESCO, Paris, November 29-December 1, 2006.

⁸ African Ministerial Conference on Science and Technology – Outline of a Plan of Action. Johannesburg, Republic of South Africa, November 6-7, 2003.

language institutions in Africa are governed by CAMES, the coordinating body for higher education in Francophone countries in Africa and Madagascar, which dates from the first years of independence of these countries.

The convention establishing CAMES was signed in Lomé on April 26, 1972 by the sixteen heads of State, who adopted all of its present statutes, including the agreement creating the *Comités Consultatifs InterAfricains de l'Enseignement Supérieur et de la Recherche Scientifique*. The professional path of the Senegalese researcher-teacher is traced on a map defined by CAMES – a map that is drawn entirely in terms of basic research, to the detriment of the applied research needed for development.

“A university researcher has to make a difficult choice if he wants to get involved in development research, because his professional advancement will depend entirely on the CAMES requirements.”

A WARO project manager

The research themes that are chosen by young researchers are therefore influenced by the imperatives of CAMES and by their natural desire to advance in their academic career.

Research not organized at the national level

The second most important institutional factor limiting research capacity in Senegal is the lack of organization. According to Senegalese officials, the fragmentation of research bodies is particularly acute at the national level. While there does exist a Ministry of Scientific Research, it is less than five years old, and there are still no research institutions attached to it. There are such institutions attached to other ministries, for example the Ministry of Agriculture. Yet the Ministry of Scientific Research is expected to coordinate and organize research.

We must however point out encouraging developments at the national level, since the Ministry has set up two new funds for researchers, one being the *Fonds d'impulsion de la recherche scientifique et technologique* (FIRST) with a budget of 300 million XOF (almost CAD\$675,000). This fund will be disbursed over the next two years for projects that are priorities in Senegal, namely health, education, agriculture, biomedical sciences and food science. A second fund, the *Fonds de publication*, is intended for the dissemination of research. According to sources in the Senegalese government, this funding should also stimulate the utilization of research.

4.2.2 Internal Factors

Precedence of teaching over research

Assessments of CADU's performance in research converge on a portrait of an organization that is essentially oriented towards teaching. The reasons are obvious: due to the high registration rates, student numbers per class are overwhelming and the teaching workload is correspondingly enormous. As indicated by former CADU students who are now employed there as teachers or administrators, lecture halls that twenty years ago held two to three hundred students are now crowded to the extreme, at times with up to a thousand students. In those conditions, it is difficult to find time to dedicate to research.

Insufficient resources allocated to research

CADU has no budget line for research, which for faculties and research centres means a systematic dearth of resources. As we have observed, the university lacks the infrastructure to provide a productive environment for research: depending on the laboratory, equipment may be lacking or not correspond to what researchers need, or the technology may be obsolete.

A good pool of researchers, drawn to better conditions abroad

Unlike many countries in Africa, where there is a lack of critical mass in terms of research, over the last few decades Senegal has developed a respectable number of high-calibre researchers. Many were trained in Northern universities, many also in Senegal (often at CADU), but their return to the country or their entry into the labour force is often followed by disappointment when they are confronted with the conditions in Senegal. The absence of suitable tools, the lack of laboratories, the lack of regard for research nationally and for the role of researcher socially, these factors tend to convince researchers to remain abroad, in the country where they were trained (be it France, Canada or the United States), or to leave Senegal for universities that are better equipped. Among the respondents we met in Dakar, one spoke at length about this problem, summing up the experience of many of her peers. After completing her doctoral studies in France, in health, she was deeply discouraged upon her return to Senegal. She found that the tools and resources she needed to pursue her research were simply not available. Deciding that she could contribute more by staying, she finally chose to work at CADU, but only after a long and painful period of reflection.

This anecdote reflects a reality common to all countries in Africa. The UN has underscored the fact that “emigration of African specialists to the West is one of the primary obstacles to development in Africa”⁹. Having lost nearly 20,000 specialists annually since 1990, to the point where technical assistance must be imported from the North, African countries are being radically depleted of their professional elites. Already, some 300,000 African professionals now live abroad¹⁰.

Senegalese researchers are highly rated, and foreign institutions and organizations are quick to offer them financial benefits that are much more attractive than what is offered locally.

“It takes great conviction and a deep commitment to our country to stay here when everything – working conditions, salaries for researchers, the lack of recognition – is telling us to look elsewhere. I turned down two positions offered in France, knowing that, if I accepted, I would almost certainly never come back.”

A CADU professor

CADU officials are painfully aware of the brain drain, speaking of it in interviews and illustrating it strikingly with the fact that, out of ten PhDs, at least six could be expected to end up leaving for positions overseas. Despite considerable effort on the part of IDRC, the retention of researchers remains a serious problem that no doubt cannot be resolved by any one financial partner. It remains to be seen whether IDRC will incorporate into future projects an explicit objective to retain recently graduated researchers.

⁹ Ainallem, Tejebe. *L'exode des cerveaux et le renforcement des capacités en Afrique*. IDRC publication (2005).

¹⁰ Source: International Organization for Migration (IOM).

Internal structure of research at CADU

Though the situation may be improving thanks to recent initiatives, representatives from the university lamented the poor organization of research at CADU. In the past, we were told, CADU researchers generally worked alone, with no interactions with their colleagues. Though that in itself is not too surprising and can be found at most universities, it limited research on multidisciplinary themes and on national development priorities, such as water and HIV-AIDS. In addition, the lack of coherence between the projects of different researchers has at times led to a waste of resources.

Other factors

Other factors of a more general nature include the fact that Francophone researchers are rarely able to communicate in English, limiting exchanges with Anglophone researchers both in the sub-region and abroad, while at the same time restricting their access to information and new advances in their field. Additionally, the way in which hierarchical relationships are structured inhibits discussion and criticism by younger researchers, while the tradition of teaching through formal lectures at CADU is less conducive to experimentation.

Recent progress

Some observers tempered this sombre portrait of the research environment by noting recent progress, such as the creation of a Cooperation Office to avoid direct contracts between donors and researchers. Though some researchers have complained about the additional bureaucracy, the new office has enabled CADU to have a master account for cooperation and separate accounts for each pole of research.

Worth noting is the interesting initiative by the Cooperation Office to create a forum for donors, the purpose being to encourage collaboration and the harmonization of projects undertaken with CADU. According to WARO, the forum could serve as a place to exchange ideas on harmonizing practices for organizational capacity building at CADU.

Also mentioned was the increase in salaries for teachers at CADU, reducing the need for them to supplement their income by doing private consulting. This may help free up time for research.

Another good sign is that the university, through FASEG, has acknowledged the importance of capacity building in the area of mobilizing resources. A new degree program on university governance and administration will include a module on that topic, with IDRC's support.

CADU is also continuing its reform process and has set up doctoral programs on water; in physics-chemistry; mathematics; legal and economic sciences; life, health and environment sciences; arts and culture; and human and social studies. Each of these doctoral programs brings together researchers of different disciplines to provide training to doctoral students. This structure should help break down the interdepartmental barriers to research. Lastly, CADU has recently taken measures to facilitate intellectual property rights.

Recent collaboration between the AUF and CADU

At the fiftieth anniversary of Cheikh Anta Diop University of Dakar – Organization of the first Francophone summer university on the arts at Dakar.

The *Agence universitaire de la Francophonie* (AUF) and Cheikh Anta Diop University of Dakar (CADU, Senegal) are organizing the first Francophone summer university on the theme “Transmission of knowledge and diversity of cultural expression: training in the arts at university”, from October 14 to 20, 2007.

This first university will be a laboratory for research and the exchange of knowledge and know-how on the arts by theorists and practitioners from both North and South.

Participants will come from Algeria, Benin, Burkina Faso, Cameroon, Ivory Coast, France, Mauritius and Tchad.

This experimental university foreshadows the foundation of a college of the creative arts.

AUF web site

Two other important players should also be mentioned: French cooperation, which invests extensively in research at CADU; and the *Agence universitaire française* (AUF), which is based at CADU and whose research programs are harmonized with CADU's, particularly with regard to support for ICTs in higher education and research.

4.3 Intentions of the IDRC-CADU Partnership

Though relations between CADU and IDRC have often begun through discussions between individuals, we found that over the years and succeeding projects there has been an institutionalization of that relationship, due in large part to the phenomena cited earlier: geographical proximity, the presence of former CADU researchers among WARO staff, the importance of IDRC as a financial partner for research, and the recent contribution of CADU's Cooperation Office. This evolution has occurred gradually. As revealed by the interviews and presented below, there are four dimensions to the intentionality of the IDRC-CADU partnership.

Pragmatism and funding often the basis of initial intentions

It is with obvious pragmatism that CADU researchers and WARO project managers express the primary intention of relations concerning any given project, namely the search for funding.

“We have so few resources to support our research that the main concern is finding adequate funding. [...] So I have to admit that we do everything we can to mobilize resources from IDRC or some other donor.”

A CADU researcher

It can’t be denied, the race for funding (as one CADU researcher laughingly spoke of it) is a common phenomenon, and for some researchers it’s a matter of choosing “the best offer” or “the one that is the least bogged down in complex procedures”. Known for acting swiftly, and with a good reputation for development research, IDRC is often approached primarily for its financial support.

Digging a little deeper, as we did with one group of researchers and also by examining project files, we found that the initial contacts between researchers and project managers do not follow any fixed standard but depend rather on the size of the project, its expected duration, the complexity and number of activities of which it is composed, or the number of participants involved. For example, there are projects initiated by researchers as unsolicited proposals, projects initiated on the basis of a call for tender, projects born of funding possibilities discovered by word of mouth, and projects of longer duration, with much more formal procedures, involving more complex preparatory stages and discussions going beyond the relationship between researcher and project manager. Launching a large project like MIMAP or SISERA, involving quite substantial funding from IDRC, is much more complex and time-consuming than launching a project like the Seminar on Anti-Tobacco Policy.

Nonetheless, according to our respondents, there is one constant: through its deep understanding of the country’s priorities, and its knowledge of the university’s researchers, IDRC has rarely missed an opportunity to work with CADU on topics in development research.

“If funding for research must accompany the needs of today, it must also be concerned with the (hypothetical) needs of tomorrow. If we want research to influence decision-makers, it should be presented when they themselves become aware of the problem. That requires investing in research many years beforehand.”

WARO manager

Good examples are SISERA and MIMAP, parts of which served to develop the methodological skills of researchers in matters of economy, monitoring and

evaluation, giving them the tools they needed well before the countries of Africa set out to develop poverty-reduction strategies. Without this upstream support to build research capacity, it is most unlikely that the World Bank would have chosen a local consultant to develop the poverty reduction framework.

A common drive in all research projects: to enable the exploration of a development problem

Beyond that primary intentionality of a practical order, in all of the projects we reviewed the driving force was a shared interest by CADU and IDRC in a particular development problem. The problems were highly varied, ranging from distance education (*Distance Learning: Information and Communication Technologies for Basic Education in Senegal*) to the need for better monitoring of poverty (MIMAP), the need to modernize documentary resources (*Digitizing the Documentary Resources of IFAN Cheikh Anta Diop*), or indeed the fight against tobacco (*Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal*).

This observation is hardly surprising, since it is in line with IDRC's first mission¹¹. What's remarkable about IDRC is that its preferred approach is to focus on local research problems as a means of finding local solutions to national priorities. Young CADU researchers are keenly appreciative of this partnership, which in providing financial support for their research has led them to reflect on the problems of their country. They noted the difference with other donors, whose financial support often depends on choosing a topic from their own list of priorities.

IDRC's approach was hailed by the government officials we met, for despite its two research funds, the Ministry of Scientific Research cannot realistically support more than twenty-odd researchers for local projects. Moreover, in recounting their experience with IDRC projects, CADU researchers said they were gratified to discover that doing local research made it possible to extend their work later on to regional or continental development problems.

One example cited was the *ICT Resource Centre Phase II* project, *Creating R&D Capacity*. Building on the findings of the first phase, this project used the dynamism created by the "renewal" and local ownership of the resource centre to focus on research and development under the Connectivity Africa program. Drawing on what had been learned in other African countries, the second phase was aimed at designing and developing human-machine interfaces for applications along with new services for marginalized and illiterate communities, using wireless technologies and free software. The portable telephone was clearly the best tool to achieve this goal. Respondents at both WARO and CADU highlighted the continuity between the two phases of the project, since the first phase, though local, dealt with what is truly a continental problem.

A crucial intention: aligning CADU projects with IDRC programming

Underlying those initial intentions is a third dimension, the need to align research projects with IDRC's program guidelines. As the researchers noted, the latter framework is in no way a hindrance to relevant local research, since it is itself aligned with Senegalese priorities. Both at the Ministry and at CADU, all agree that IDRC's programming serves as a guide, but does not limit anyone to working on problems having nothing to do with Senegal. Table 4.2 presents the relationships between the projects studied and IDRC program objectives.

¹¹ "The International Development Research Centre (IDRC) is a Crown corporation created by the Parliament of Canada in 1970 to help developing countries use science and technology to find practical, long-term solutions to the social, economic and environmental problems they face. Our support is directed toward creating a local research community whose work will build healthier, more equitable, and more prosperous societies." (IDRC web site)

Table 4.2 Links Between CADU Projects and IDRC Programming

Project ¹²	Status	IDRC Program Under Which the Project was Conducted	Program Objectives
065022 - Institutional Support: CREA (1995 – 1998)	Finished	TEC (now GGP)	The TEC program initiative supported knowledge acquisition and the development of research capabilities aimed at improving the negotiating skills of developing countries; contributing to the design of mechanisms and procedures to help developing countries derive greater benefit from the opportunities offered by globalization; and helping developing countries to align their economic policy with international trade policies.
065225 - Information and Communication Technologies Resource Centre (1998 – 2002)	Finished	ACACIA	Acacia works with African partners to help countries in Africa apply information and communication technologies (ICTs) to social and economic development.
065223 – Distance Learning: Information and Communication Technologies for Basic Education in Senegal (1998 - 2003)	Finished	ACACIA	Acacia works with African partners to help countries in Africa apply information and communication technologies (ICTs) to social and economic development.
065296 - Telemedicine / Telehealth in Africa – Phase 1: Pilot Projects (1999 – 2004)	Incomplete	ACACIA	Acacia works with African partners to help countries in Africa apply information and communication technologies (ICTs) to social and economic development.
100121 - MIMAP – Senegal (2000 – 2003)	Finished	MIMAP	The MIMAP Senegal project aims to: <ul style="list-style-type: none"> • enhance local capacity to evaluate the poverty impact of macroeconomic and adjustment policies; • promote greater understanding of the nature and depth of poverty, while analyzing the variables that contribute to it; • foster greater collaboration between researchers and public sector decision-makers concerned with poverty reduction policies.

¹² The start and finish dates of projects are from preparatory documents provided by IDRC.

065077 - Secretariat for Institutional Support for Economic Research in Africa (SISERA) (2001 – 2006)	Finished	SISERA	SISERA is a multi-donor initiative created in July 1997, whose purpose is to provide financial and technical support for economic research institutions in Africa. Its modes of intervention include institutional support and support for collaborative thematic research, management capacity building in research centres and their integration into the international scientific community through institutional links, exchanges among researchers and connection to the Internet.
101230 – Regional NEPAD Activities (2002 – 2004)	Finished	ESARO Activity Fund (RAF)	The ESARO Activity Fund (RAF) provides short-term, flexible assistance to exploratory initiatives throughout the region.
102280 - MIMAP Senegal: Phase II (2004 – in progress)	Active	GGP	The MIMAP Senegal project aims to: <ul style="list-style-type: none"> • enhance local capacity to evaluate the poverty impact of macroeconomic and adjustment policies; • promote greater understanding of the nature and depth of poverty, while analyzing the variables that contribute to it; • foster greater collaboration between researchers and public sector decision-makers concerned with poverty reduction policies.
102542 - ICT Resource Centre – Phase II (2005 – in progress)	Active	Connectivity Africa	Connectivity Africa was designed to promote research, development and innovation in the use of Information and Communication Technologies (ICTs) for progress in Africa, focusing on the areas of education, health and the economy.
102889 – Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal (2005 – 2006)	Finished	ESARO Activity Fund (RAF)	The ESARO Activity Fund (RAF) provides short-term, flexible assistance to exploratory initiatives throughout the region.
103502 – SCAULWA 2005: Library Consortiums (2005 – 2006)	Finished	ESARO Activity Fund (RAF)	The ESARO Activity Fund (RAF) provides short-term, flexible assistance to exploratory initiatives throughout the region.
103582 – Science, Media and Society: Methodological Workshop (2005 – in progress)	Active	ESARO Activity Fund (RAF)	The ESARO Activity Fund (RAF) provides short-term, flexible assistance to exploratory initiatives throughout the region.
103111 - Integration of ICTs in Local Government in Senegal (2006 – in progress)	Active	ACACIA	Acacia works with African partners to help countries in Africa apply information and communication technologies (ICTs) to social and economic development.

<p>100586 - ECOHEALTH Training and Dissemination Workshops for West Africa, North Africa and the Middle East (WAF/MENA) (2000 – 2001)</p>	<p>Finished</p>	<p>ECOHEALTH</p>	<p>This program supports research on the relationships between the components of ecosystems, in order to define and evaluate priority issues affecting the health of communities and the sustainability of the ecosystems in which they live.</p>
<p>100754 - Digitizing the Documentary Resources of IFAN Cheikh Anta Diop (2001)</p>	<p>Finished</p>	<p>ACACIA</p>	<p>Acacia works in collaboration with its African partners to help the countries of Africa apply Information and Communication Technologies to their own social and economic development</p>
<p>103589 - Local Management of Water using Geographic Information Systems in French Speaking West Africa (2006 – in progress)</p>	<p>Active</p>	<p>Office of the President</p>	<p>N/A</p>
<p>104029 - Institutionalizing Gender and Women's Rights and Citizenship at CADU (2006 – in progress)</p>	<p>Active</p>	<p>WRC (part of SEP)</p>	<p>Women's Rights and Citizenship (WRC) is a new program of IDRC, launched on April 1, 2006, aimed at supporting applied research in the area of women's rights, citizenship and development.</p>

The objective of research capacity building is increasingly explicit

The intention of research capacity building is not equally explicit in all of the projects we studied. Our interviews with CADU researchers revealed that the point of departure for a project tended to be a research problem. As a project took shape, the focus was on determining its modes of intervention. However, the researchers noted that, as the process of mounting a project went on, their exchanges with IDRC increasingly dealt with objectives of research capacity building, which subsequently were stipulated in the project document.

“It must be remembered that discussions toward launching a project usually begin with the aim of finding a practical solution to a development problem. Only later do we talk about research capacity building, which has been a fundamental objective since the mid-1990s.”

WARO project manager

The project form provides four ways in which to indicate objectives of research capacity building:

- generic reference to research capacity building;
- promote research and/or encourage the generation of knowledge on specific projects and/or the use of specific approaches;
- strengthen links between research and policy;
- promote and support the creation of networks among researchers and/or with other relevant stakeholders.

The project documents reveal that eight of the twenty projects reviewed made a generic reference to research capacity building; all twenty noted the objective of promoting research; five aimed to strengthen the links between research and policy; and seven also targeted the creation of networks. Both our CADU respondents and the university’s governmental partners stated that to their knowledge IDRC was the only donor with whom discussions on research capacity building were so frequent. As one respondent told us, it just goes to show how strongly IDRC wants to help Senegalese research stand on its own.

Examples of a generic reference to research capacity building as expressed in project documents

Provide technical support to ACACIA target groups (**Information and Communication Technologies Resource Centre project**)

Help teams of researchers participating in training workshops to transform their preliminary research proposals into complete research protocols based on the ecosystem approach to human health (**ECOHEALTH project**)

Enhance African documentary resources by using the Internet to give the scientific and student community, along with the general public, access to part of the immense historical and cultural heritage held by IFAN (**Digitizing the Documentary Resources of IFAN project**)

Assist students in research projects on wireless technologies and free software, thereby creating research/development capacity that will encourage the generalization of these tools to the benefit of local communities and organizations (**ICT Resource Centre Project – Phase II**)

4.4 Description of IDRC Capacity Building Interventions at CADU

Over its two decades of work with CADU, IDRC has been involved in a variety of projects, applying different approaches depending on size and context. Our review does however reveal a certain number of trends, which we describe below. We begin by proposing a classification based on the level at which change was sought, then present the array of activities that were

carried out alone or together, and the evolving choice of activities; we will also mention the distinct roles played by IDRC, often in the same project.

4.4.1 Interventions Aimed at Three Levels of Change

Our interviews at WARO and CADU revealed a three-part typology of the level of change targeted a typology that is sufficiently common to have been described already in an IDRC study¹³. The projects in our sample may indeed be catalogued by whether they aimed to develop the capabilities of one or more researchers (**individual change**); to strengthen an organizational unit of CADU, such as a faculty or centre of excellence, by providing it with adequate infrastructure (**infrastructural change**); to affect change in management practices (**improvement of management**); to develop inter-organizational capabilities at CADU (**networking**); or to build research capacity beyond CADU (**societal change**) by targeting external stakeholders. These distinctions are never of course as sharp in practice as this list may suggest, and rarely did a project focus on a single level of intervention.

Individual changes

Generally speaking, the vast majority of projects focused first and foremost on developing the capabilities of a given researcher or group of researchers. This was the case of the project *Distance Learning: Information and Communication Technologies for Basic Education in Senegal*, which aimed notably to develop the capabilities of a pioneering CADU professor in distance education; and the project *Telemedicine / Telehealth in Africa*, which developed the capabilities of a specialist in telemedicine. Other projects targeted a group of researchers, an example being *Local Management of Water using Geographic Information Systems in French Speaking West Africa*, which helped young CADU researchers build research capacity in the fields of geographic and water information systems. Another example is the project *Digitizing the Documentary Resources of IFAN Cheikh Anta Diop*, whose main purpose was to facilitate access to IFAN resources by CADU researchers. In virtually all of the twenty projects we reviewed, the project documents indicated a specific intention for individual capacity building, as has been noted for IDRC projects with other universities (e.g. Makerere).

Organizational changes

Nevertheless, a second sub-group of projects went beyond the individual. These were more substantial, generally longer-term interventions aimed at strengthening an organizational unit of CADU. There are a number of examples, starting with certain initiatives that targeted a faculty, others a unit common to multiple faculties such as a library, others still focusing on laboratories. Thus the *Information and Communication Technologies Resource Centre* project, which went beyond financial support for research by CADU's *École normale supérieure*, provided one of the laboratories with computers and printers. In the same fashion, *Information and Communication Technologies Resource Centre – Phase I* provided modern equipment to the Faculty of Science and Mathematics for the creation of an equipment room and laboratories. These examples are really organizational supports that strengthen existing infrastructure, a dimension present in the SISERA, MIMAP and many other IDRC projects at CADU.

¹³ Neilson, S. Lusthaus, C. Capacity Building at IDRC: Results and Factors Supporting Results. 2006 p. 12

IDRC’s intervention models also include projects to develop the management capabilities of an organizational unit. Here we are in complete accord with the capabilities listed by Bernard (2000) and also mentioned by our respondents at CADU. The management capabilities developed by this type of intervention included recruiting, supervising and training researchers; managing a research centre; and mobilizing research resources (e.g. SISERA and *Institutional Support: CREA*).

“It has to be recognized that researchers are not necessarily good managers. When it came to figuring out the best way to support CREA, we had to think about developing basic management skills, like how to mobilize research funds, how to manage financial resources, how to manage human resources. Without that kind of initiative we would have missed a great opportunity to develop the management aspect of research.”

WARO manager

Moreover, the project evaluation of SISERA ¹⁴ notes that support for management, which was added to the project several years after it began, is a crucial factor in the success of centres like CREA, which between 1997 and 2004 received such support on five occasions.

Certain IDRC interventions at CADU also included capacity building for networking, i.e. inter-organizational capacity, the most noteworthy example being SISERA, which connected nearly twenty research centres across Africa with the aim of fostering exchanges, knowledge sharing and the dissemination of research.

These mechanisms of organizational capacity building form the core models adopted by IDRC at CADU, and often were combined in the same project.

Thus we discover increasing complex approaches, with repeated passages from one level of intervention to another, which leads us to make the following observations. First, developing the capacity of an individual researcher through support for his work is a low-risk approach, because the project’s purpose is easily defined. The higher-level models, whether support for research equipment or support for management, presuppose the existence of well-trained researchers, and would make no sense if support were not first given to researchers themselves. There is thus a logical order to research capacity building, the surest way to get results being to focus initial activities on the simplest unit of change, the researcher.

It should also be noted that all of the approaches cited above target the research supply, i.e. the players (people or organizations) who generate research products. And indeed, both WARO project managers and CADU researchers acknowledged that IDRC has generally concentrated on developing the suppliers, enabling young researchers, professors, research centres and institutes to produce local research of better quality.

Change at the societal level (demand for research)

Recently however, IDRC has paid greater attention to the need to link research supply to the demand for it, to foster the emergence of research that has greater influence and is better utilized by decision-makers. Cited in the sidebar, a recent IDRC publication, *The Policy Paradox*, focuses on the controversial question of making direct links between research and its influence on policies.

The idea of creating a direct link between research and policy influence is still controversial for many researchers who feel quite strongly that research should not be limited to and directed by the demands of a society, but that more is accomplished when research is unfettered and free to follow its own directions. This is a valid position, and free research should be an important part of research in any field. Several questions arise from this. How does research influence the policy process? How is knowledge used? How do researchers bring ideas to decision-makers? And how do decision-makers get access to ideas? ¹⁵

Fred Carden. *The Policy Paradox*

Applying this desire for a stronger relation

¹⁴ Secretariat for Institutional Support for Economic Research in Africa (SISERA), Evaluation of the Secretariat for Institutional Support for Economic Research in Africa (SISERA). June 2004

between supply and demand was not without obstacles, for it meant getting involved in a process of change with significantly broader scope, a process that would foster a *national* research culture and thereby increase the relevance of CADU. But IDRC is structured around sectoral programming, where the role of institutional projects (in the primary sense of the term) is less clearly defined. Secondly, the relatively modest size of IDRC interventions (only the MIMAP Phase II budget was over \$500,000) adds to the difficulty of supporting projects aimed at stimulating the demand for research. In some countries in Africa, other players have gained a monopoly on this part of the market, making long-term investments in the transformation of institutions and ultimately in the transition towards a research culture. This is the case of Swedish cooperation in Uganda.

Despite these constraints, IDRC has undertaken activities to create an interface between CADU and representatives from civil society (who can stimulate demand for research), the private sector (who can be eager for innovation when the results of research are already available, but don't like waiting while research itself is carried out), and decision-makers (who can specify present and future needs). Such interventions make it possible to link the supply provided by CADU to local demand for research.

“It must be remembered that the essential premise of development research, in its most pragmatic sense, is that it must be formulated as a response to development problems confronting the decision-makers of Senegal. Decision-makers of today primarily, but also decision-makers of tomorrow.”

WARO project manager

A good example is the *Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal*, which brought together researchers, decision-makers and stakeholders from civil society such as journalists, for several days of work on various approaches in the anti-tobacco campaign. Another example is the project *Information and Communication Technologies Resource Centre – Phase I*, which offered consultation days as an opportunity for researchers to interact with people from the private sector.

“This (the interfacing of supply and demand) is also part of the wide array of tools and approaches that IDRC should continue to use. Building our capacity to do quality research is fundamental, but facilitating the task of influencing leaders is also (in my opinion) a research capacity that should be encouraged, since unused research is sterile.”

Young CADU researcher

So there is a natural predominance, as shown in Table 4.3, of models of intervention that strengthen the research supply, with a few solid initiatives in established programs that promote demand by facilitating the dissemination of research and generating greater awareness of it on the part of those who might use it.

¹⁵ The Policy Paradox in Africa – Under the direction of Elias Ayuk and Mohamed Ali Marouani, forthcoming, Sage Press, New Delhi, 2008

Table 4.3 Focus of IDRC Interventions

Core Interventions by IDRC to Develop Research Activities	One-off Activities to Connect Supply and Demand	Activities not in IDRC's Standard Repertoire
Objectives: Improve CADU's research supply	Objectives: Facilitate dialogue between the research supply at CADU and demand in Senegal	Objectives: Improve the demand for research in Senegal
All IDRC activities target this objective in one way or another.	IDRC managers and CADU researchers mentioned a few IDRC interventions of this kind (build awareness among decision-makers, strengthen pressure groups, mobilize the general public, etc.).	CADU researchers and IDRC managers did not mention any direct interventions of this kind by IDRC.

4.4.2 Wide Range of Modes of Intervention Applied

A variety of tools available depending on project needs

Anne Whyte presents an exhaustive typology of the ways in which donors strengthen the capabilities of their partners, notably with respect to ancillary areas (Whyte, 2004). Our review of IDRC projects at CADU revealed a number of the approaches listed by Whyte, including the following:

- Provision of consultants, researchers or resource persons: one example was the project *Distance Learning: Information and Communication Technologies for Basic Education in Senegal*, which provided CADU with ICT specialists from the University of Ottawa.
- Training courses: a number of IDRC initiatives used training courses among their methods of building research capacity. Some of the training focused on improving the quality of research management; for example, the managers of all research centres supported by the SISERA project were offered courses in strategic planning, monitoring and evaluation or in mobilizing financial resources. In other projects, such as MIMAP, the training was of a methodological nature since the researchers were trained in different methods of evaluating the impact of macroeconomic policies. As another example, in the ECOHEALTH project *Training and Dissemination Workshops for West Africa, North Africa and the Middle East*, CADU researchers were trained in how to prepare research proposals. And in *Local Management of Water using Geographic Information Systems in French Speaking West Africa*, IDRC's assistance enabled some CADU researchers to develop skills in preparing research proposals.
- Workshops, lectures, seminars: the project *Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal* is an example of using seminars to develop capacity.
- Centres of excellence: The SISERA project best exemplifies support for centres of excellence, since this project led to just under 20 such centres being networked together on a regional basis.
- Network support: the most striking example of network support is the SISERA project, which began as an IDRC initiative and which was aimed at building synergies between different research centres by giving them long-term support. These centres received technical support, training, infrastructural support and support for the dissemination of research. Albeit modest, the contribution of the Standing Conference of African

University Librarians in Western Area (SCAULWA) also deserves mention as an example of support for a network that promotes research.

- Scholarships and bursaries: The project *Information and Communication Technologies Resource Centre – Phase I* enabled professors from CADU to visit France for professional development, while *ICT Resource Centre – Phase II* offered scholarships to a small group of CADU students to allow them to work on new applications and develop their capacity to do research. Also noteworthy is the project *Institutionalizing Gender and Women’s Rights and Citizenship at CADU*, an important element of which was the granting of scholarships to five CADU students.
- Equipment, infrastructure, connectivity: Examples are numerous, such as the various projects on the ICT theme, which focused on connectivity. The two phases of the *ICT Resource Centre* project are surely the most relevant. The SISERA projects provided CADU’s CREA (as it did several other centres of excellence) with the infrastructure, furniture and basic equipment required to pursue its research activities. The project *Telemedicine/Telehealth in Africa – Phase I* made a modest contribution in supplies and hardware to CADU researchers specializing in telemedicine. We should also mention *Integration of ICTs in Local Government in Senegal*, which gave new life to the laboratory of CADU’s *École polytechnique* by providing it with badly needed material resources. Lastly, *Digitizing the Documentary Resources of IFAN Cheikh Anta Diop* contributed state of the art equipment for the digitizing process.
- Support for the publication/dissemination of research: This critical component of research support was especially evident in the SISERA project, where researchers learned how to prepare articles for publication and how to discuss research results in layman’s language in order to make them accessible to the general public. The CADU researcher involved in *Distance Learning: Information and Communication Technologies for Basic Education in Senegal* also obtained technical and financial assistance from IDRC for the dissemination of the results of his research. The project *Local Management of Water using Geographic Information Systems in French Speaking West Africa* also focused on consolidating and disseminating research results.
- Strengthening pressure groups in support of research: The *Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal*, which brought together researchers, decision-makers and journalists, was a modest attempt at strengthening the voice of media groups on a health problem studied at CADU.
- Support for documentary resources: in the project *Digitizing the Documentary Resources of IFAN Cheikh Anta Diop*, one mode of support was to train IFAN employees in the digitizing of documents. The project *Institutionalizing Gender and Women’s Rights and Citizenship at CADU* set up a documentation centre dealing with the gender theme.

According to our respondents, these various approaches were often used in parallel, and almost all of the projects that we studied combined one or more of them.

A similar work code for all approaches

According to respondents both at WARO and especially CADU, in all its interventions, IDRC has followed essentially the same governing principles, principles that they perceive as the mark of quality projects. Listed in Table 4.4, they are perfect examples of good practices of aid effectiveness (Paris Declaration, 2005). We noted their presence in many of the projects we examined.

Table 4.4 Good Practices that Contribute to IDRC’s Capacity Building ¹⁶

Good Practice for Capacity Building	How it was Manifested in IDRC Projects at CADU	What our Data Show
Persistence		Through two decades of involvement with CADU, during which the latter has gone through many changes, IDRC has aligned its practices with the needs of the university. In some projects activities have extended over several years.
Flexibility	Funding agreements Agility in responding to the needs of a developing country	
Resilience	Staying engaged in difficult circumstances Providing legitimacy, credibility and trust	SISERA is an oft-cited example. Even during the period of internal uncertainty after the change of leadership at CREA, IDRC maintained support for it.
Building Partnerships		
Relationships	Inter-organizational linkages Face-to-face interactions between IDRC staff and researchers Providing legitimacy and credibility to partners and beneficiaries	The links between IDRC and CADU are both personal and organizational. The WARO and CADU projects have built bridges between the various stakeholders of Senegalese society.
Harnessing Existing Capabilities		
Strategic intelligence	Scanning locally and globally, reinventing locally – regional presence to determine existing capabilities Staff knowledge of regions	IDRC has a national presence, enabling it to maintain strategic intelligence and regular monitoring of projects in which it invests with CADU.
Build on existing capabilities	Sustained mentoring – providing long-term support beyond one-off training sessions Regional presence – for determining existing capabilities Use of local, existing capabilities instead of creating parallel systems	IDRC has a national presence, enabling it to maintain strategic intelligence and regular monitoring of projects in which it invests with CADU. The projects in our sample served to develop CADU’s own teams of researchers, unlike other funding partners, which drew on teams composed largely of researchers from the North.
Relevance of the Problem		

¹⁶ Adapted from a 2003 Development Assistance Committee document and the IDRC’s 2006 Corporate Assessment Framework

<p>Locally-driven agenda</p>	<p>Local ownership</p> <p>Local and broad participation in determining the agenda</p> <p>Programs continually evolving to meet the demands of a developing country</p> <p>Southern perspectives and voices considered in the analysis of development challenges</p> <p>Support for devolvement of major research initiatives when appropriate</p>	<p>Through meetings with representatives of various stakeholders concerning research in Senegal, WARO has developed a good understanding of national priorities.</p> <p>All IDRC projects address a national or regional priority and stimulate reflection on the national problems of tomorrow.</p>
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Three essential roles

Lastly, respondents at both CADU and WARO described three roles that IDRC has played in different projects, often in parallel. The first is that of financial partner. The second is that of a provider of technical assistance, and we include in this category the various training courses, workshops and seminars, whether given directly by IDRC personnel or not. The third role is more fluid, that of being the liaison (interfacing, negotiation, etc.) between CADU and one or more external partners.

Table 4.5 Examples of IDRC Roles in its Interventions with CADU

Project	Examples of Research Funding	Examples of Technical Assistance	Examples of Interfacing
Information and Communication Technologies Resource Centre – Phase I	<p>Support in the form of travel bursaries for Senegalese professors for specialized study in France</p> <p>Support in the form of student fellowships</p> <p>Provision of modern equipment (computers, antenna) to the Faculty of Science and Mathematics for the creation of an equipment room and a lab</p>		Links set up between CADU, Senegalese NGOs and similar institutions in Quebec and Canada
Distance Learning: Information and Communication Technologies for Basic Education in Senegal	<p>Financial support to a researcher in distance education</p> <p>Funding for a research project at CADU's <i>École normale supérieure</i></p> <p>Funding of equipment for the laboratory of a CADU researcher</p>		<p>CADU specialists were put in contact with their peers at a Canadian university (University of Ottawa)</p> <p>Aid for the dissemination of research results</p>
Telemedicine / Telehealth in Africa – Phase I: Pilot Projects	<p>Financial support to a specialist in telemedicine at CADU</p> <p>Funding of equipment for the project</p>	Lectures and workshops to build awareness	Liaison between CADU researchers and decision-makers
MIMAP I and II – Senegal		Technical assistance in the form of various training workshops	
Secretariat for Institutional Support for Economic Research in Africa (SISERA)	Funding for the computers, software, etc. required for establishment of the centre		

ICT Resource Centre – Phase II	Scholarships and bursaries to students and professors, enabling them to work on new applications and further their research capabilities Funding for new equipment and better software		N/A
Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal		Workshops conducted	Researchers, decision-makers and journalists were brought together to develop a research proposal
SCAULWA 2005: Library Consortiums	N/A	Technical assistance to: improve access to CADU's documentary resources; strengthen cooperation between libraries; develop the use of ICTs in managing the library	Library consortiums were set up in several different countries
Science, Media and Society: Methodological Workshop		Training courses provided	Scientists were brought into contact with communities in order to strengthen their role in development
Integration of ICTs in Local Government in Senegal	Funding for research by a number of young researchers Support for the college's telecomputing laboratory by providing financial and material resources along with research objectives	Theme-based training to ensure the sustainability of acquired skills and contribute to the development of new skills in ICT research	Interfacing of CADU with Senegal's private sector
ECOHEALTH		Training provided to develop researchers' ability to prepare complete, substantial research proposals	
Digitizing the Documentary Resources of IFAN		Training provided in the digitizing of documents	
Local Management of Water using Geographic Information Systems in French Speaking West Africa	Funding of research on water and geographic information systems	Technical assistance to help the university develop expertise on GISs, and training in formulating research proposals in the context of a competition	Interfacing of CADU with the Université du Québec à Montréal.

Institutionalizing Gender and Women's Rights and Citizenship at CADU (104029)	Research fellowships to five students		
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4.5 Performance and Continuity

Looking over the nature and typology of IDRC’s initiatives in research capacity building at CADU, the results are on the whole positive. But a few suggestions were made by our respondents about certain projects, with a view toward achieving better results in future. These suggestions are given below together with our own analysis of the projects.

4.5.1 Results of Research Capacity Building at CADU

A balanced overall picture

On the whole, when we asked our respondents, “What types of capacity were developed by your project?” the answers converged toward a balanced picture. For respondents from both WARO and CADU, new capabilities for doing and managing research were demonstrable examples of success. Since the initiatives variously targeted researchers, faculties (or some other organizational structure) or the institutional level, the results reported were also in terms of those levels of intervention.

Excellent results in developing the capabilities of researchers

The laudatory reports of researchers assisted by IDRC were hardly surprising, for they reflect an understandable satisfaction in being supported and encouraged financially in one’s work. But there was more than that to these very positive reviews, and our respondents offered multiple examples of how their research capacity had been further developed thanks to an IDRC project. The first, as might be expected, was the acquisition or advancement of knowledge, skills or know-how in a variety of fields of work. Senegalese professors trained through the *Information and Communication Technologies Resource Centre* project were thereby enabled to replace the foreign professors who had been working there, while students were able to conduct research in ICTs and apply their results to development problems.

Some evaluations of the training provided under the MIMAP project, or the various workshops in the SISERA project, spoke of the same benefits, though these projects had concerned management (e.g. training in project management or mobilizing funding) or work methodologies (methods of macroeconomic analysis for monitoring poverty). Respondents who had been involved in the *Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal* acknowledged the utility of what they had been taught, for they had learned how to prepare better research proposals. There are many more examples we could cite, since all of the training IDRC provided to CADU participants had, according to our sources, the same beneficial effects. A rough calculation suggests that some 600 CADU researchers and students were positively affected by the training, bursaries or seminars dispensed through the projects we reviewed.

Those new skills enabled researchers to develop some excellent applications, as we witnessed at demonstrations by students who had been trained through the *Information and Communication Technologies Resource Centre* project. These included programs to allow cattle farmers to use their cell phones to check the condition of watering holes, obtain information about animal diseases, and so on.

The second result of IDRC’s initiatives at CADU is the rich production of research, theses and publications that

End results of IDRC initiatives for CADU researchers

Increased knowledge, skills, know-how
 Research, theses, publications produced
 Visibility and recognition
 Promotion or career improvement
 Networking across Africa and beyond

Access to additional funding

Summary of interviews and written reviews

researchers have turned out in the context of projects. The list is long and the count is still in progress.

A third result cited by some CADU researchers was the visibility and recognition they gained on the international scene, which enabled them to disseminate their research. A good example is the CADU professor who, thanks to his involvement in the project *Distance Learning: Information and Communication Technologies for Basic Education in Senegal*, submitted several articles on this theme for publication.

Another encouraging result was that collaboration with IDRC enabled some researchers to expand their professional horizons by carrying out consultancies for the Senegalese government or development agencies. Of three researchers who had done work through CREA, one was called upon to serve as an advisor to Senegalese high officials, while the other two led studies on local development problems for the World Bank.

Our respondents also cited the possibilities for networking with researchers in other universities in the sub-region (through the SISERA project) or with Canadian universities like the Université du Québec à Montréal (UQAM), Laval University or the University of Ottawa. And two researchers said their involvement in IDRC projects had made it possible for them to obtain additional funding, in this case from French cooperation for a later phase of their initial research.

Results at the individual level, however, are of limited duration. This is explained by several factors, starting with the brain drain, which often deprives CADU of its best-trained resources (those who were trained through IDRC projects). Though no one could say just how many researchers trained by IDRC had left their positions at CADU, we were told that it was a serious problem. A second obstacle to the sustainability of individual results is the difficulty of putting into practice newly-acquired knowledge and skills, due to the lack of equipment in laboratories or the lack of time away from teaching duties.

“Often, at the end of a training course, I’m eager to apply what I’ve learned, for example a course in monitoring and evaluation. But once I’m back in the faculty, I can never find the time to reflect on how to implement a monitoring system because day-to-day pressures absorb all my time.”

CADU researcher

Initiatives aimed at researchers enhanced their ability to do research, and in some cases to manage research or disseminate its results. But only with larger projects, where the goal is capacity-building on an organizational level, is it possible for all such capabilities to be enhanced within the same project.

Encouraging results at the organizational level

In Senegal, IDRC has invested in projects of sufficient size that changes can be expected at the organizational level. That was indeed confirmed by our respondents, who listed numerous projects including SISERA and CREA, support for development of the ICT Resource Centre, the project to digitize IFAN resources, and *Distance Learning: Information and Communication Technologies for Basic Education in Senegal* to name just a few.

Projects with a potential for results at the organizational level share a number of characteristics: a bigger budget, ranging from a quarter of a million to half a million dollars; longer duration, extending over several years; and explicit objectives on research capacity building.

All of the project documents for the projects listed in the sidebar made a generic reference to research capacity building while also aiming to promote research. For some, there were also objectives for developing connections between research and policy-making, or for promoting and supporting the creation of networks among researchers and other relevant stakeholders. In each case, the expected results were accomplished.

A few of the organizational units at CADU whose capabilities were strengthened (to conduct research, manage research, etc.)

CREA

Faculté des sciences et technologies de l'Éducation et de la Formation

Information and Communication Technologies Resource Centre

IFAN

École normale supérieure

The laboratory of CADU's *École polytechnique*

It is important to view the list as a spectrum in which some projects, despite their general capacity-building elements, primarily improved the capacity of these centres to **carry out** research. Others, however, went further by developing capacities for the **management** of research, while a few projects genuinely strengthened capabilities for **disseminating** research and making it influential.

Distance learning: ICTs at the service of basic education

Continuing over a number of years and with a budget of a hundred thousand dollars, this project has much in common with other projects of extended duration. Since basic education is an important national priority, the *Faculté des Sciences et Technologies de l'Éducation et de la Formation* (FASTEF) of CADU's *École normale supérieure*, together with the University of Ottawa and IDRC, joined forces to develop the skills of teachers in community elementary schools using distance learning. The project involved two schools, one in the urban fringe and one in a rural environment. According to project documents and reports by key players, the project's objectives were accomplished. But it is not clear how research capacity was strengthened in any significant way, apart from the acquisition of computers. Some teachers from the *École normale supérieure* participated in the project, and CADU enjoys a certain visibility in Canada. Capacity building at FASTEF was therefore limited to improving its ability to do research, but did not extend to the management of research, nor to making the products of research more influential.

ICT Resource Centre

The two phases of this project provide a good example of results achieved at both the organizational and institutional levels. At the time, under the ACACIA program in 1997, IDRC decided to support the emergence of ICTs in Africa in order to prevent the continent from becoming marginalized in this area. To this end, it established "national strategies" in four African countries – South Africa, Mozambique, Uganda and Senegal – in the hope of reducing the digital divide between Africa and the other continents. In Senegal, where it began by creating CADU's *Information and Communication Technologies Resource Centre*, IDRC then involved a most appropriate partner, the Department of Mathematics and Computer Science of CADU's Faculty of Science and Technology.

The strategies for research capacity building were numerous: a review of curricula; equipment to provide better teaching conditions; an applications development laboratory to enable

students, under the supervision of their professors, to support IDRC projects in the field. At the same time, IDRC granted travel bursaries so that some students could continue their studies in France, while a former Senegalese professor was brought back to strengthen the department. The results of this project go far beyond the personal rewards experienced by individual researchers.

At the organizational level, both the Department and the ICT Resource Centre improved their ability to manage research, for they gained a high-quality staff with good designers and good technicians; they were also enabled to publish their research and make it relevant to Senegalese society. According to CADU researchers and the Senegalese government, research at the Resource Centre contributed to creating a new political environment favourable to the effervescence of ICTs. Prior to that point, this rather new problem had not been seen as a potential solution to the problems of development. Through the technologies and research at the Resource Centre it would appear that Senegal has begun a gradual transformation of its infrastructure toward a service available in both urban environments and the countryside. As we were informed by project managers, the Resource Centre is also developing tools and products that will be tailored for different users.

In the second phase of this project – a logical continuation of the first – the Resource Centre is designing and developing human-machine interfaces (HMI) for software applications, along with new services for marginalized and essentially illiterate communities, drawing upon wireless technologies and free software. The mobile telephone was found to be the best tool for the purpose. The researchers we met cited tangible results: first, their *personal capabilities were strengthened* and they were able to design and develop free-standing applications operating on personal digital assistants and mobile telephones, as well as applications for SMS servers and for voice-based servers in the national languages. Second, the Resource Centre now has the equipment to *produce* these products under better conditions. And third, the quality of these products has accelerated the *dissemination* of the fruits of research, helping communities that previously were marginalized.

With its multidimensional interventions, this project has affected not only the researcher in his organizational context but a host of beneficiaries throughout Senegalese society.

Strengthening CREA through an array of initiatives

SISERA is the single project that in the most complete way has developed the research capacity of a CADU component – CREA. Through the SISERA project, IDRC supported CREA over a period of seven years (along with some ten research centres and organizations across the African continent). The support given CREA was both financial and technical, aimed at enabling it to participate in an active and meaningful way in determining structural adjustment policies for the region. Previously, policies for economic reform had failed in Senegal because insufficient consideration had been given to local economic problems. Though evaluations of the SISERA project report both failures and successes, the fact remains that in terms of research capacity building the SISERA project is a major example of success, because it developed:

- The capacity of both researchers and CREA to do research: CREA's researchers were given training to improve their research methodologies; additionally, CREA was provided with tools and technologies to enable it to conduct research under better conditions.
- The capacity of CREA to manage research: thanks to training courses in project management, organizational evaluation, etc., along with supervision and technical assistance by project managers, CREA improved several different aspects of its management: governance, administrative procedures, monitoring and evaluation tools,

strategic planning, and the preparation of applications for research grants. The director of CREA was enabled to participate in twice-yearly meetings with the directors of the other centres.

- The capacity of CREA and researchers to disseminate research: this was in part the result of the network created to link the centres, which according to CREA made it possible to disseminate its work across the sub-region. At the same time, thanks to the improved quality of its research, it was able to participate in international conferences and increase the number of its publications. Like all of the centres involved in the SISERA project, CREA was strongly encouraged to start considering how to disseminate research from the very inception of each project; this led to the *publication of CREA's policy bulletins* and the ever more frequent presence of CREA as an advisor on national questions.
- The capacity of CREA to exert influence through its research: the dissemination just mentioned cannot help but exert influence, be it through research documents or articles written in layman's language aimed at a broader readership. But the most convincing example of CREA's influence is unquestionably its increasing involvement in economic studies commissioned by the state and by multilateral financial partners.

Unfortunately, things at CREA are no longer as dynamic as they were, and activities there now no longer reflect the improvements in both individual and organizational capabilities that had been generated by IDRC's support. Since the departure of CREA's director, who had truly been the driving force behind the organization, and under whom CREA produced research of very high quality, the team of researchers initially trained through IDRC grants has left CREA. It has regrouped around a new research centre, the *Consortium pour la recherche économique et sociale* (CRES), which is associated with CADU but operates under different parameters. This raises an interesting question for IDRC, the risk that support provided in a weak institutional context may end up creating independent competitors. Dynamic, recognized, consulted by national decision-makers, CRES has since brought together the very researchers who formerly worked at CREA.

4.5.2 Factors that Affected Achievement of These Results

IDRC's achievement of these generally positive results was conditioned by an assortment of both favourable and unfavourable factors. This section explores both types of influence.

Proximity of the two organizations

The proximity of CADU and IDRC (in the location of its WARO bureau in Dakar) was unquestionably a highly positive factor contributing to the achievement of results. The closeness of the two organizations made it possible to go beyond the more distant exchanges typical of a long-distance relationship. Over and over we were told by our respondents that being able to put a face to the name of each project manager humanized the relationship, and of course in Senegalese culture interpersonal contact is of profound importance. Regional project managers noted moreover that despite their relative proximity to Burkina Faso and Mali, activities in Dakar inevitably benefited from more regular attention, a different kind of supervision, above all in person.

Also, our respondents indicated that IDRC’s local presence in Senegal allowed it to develop a deep understanding of the country, and thus to provide projects with better guidance.

A number of WARO respondents remembered with pleasure the time when relations between WARO and CADU were even closer, facilitated by the informal exchanges that took place in the cafeteria or while doing research at the library.

Influence of the local context

As was pointed out to us by both CADU researchers and IDRC managers, demand from the political sector clearly facilitated the success of certain projects that offered short-term solutions to the concerns of decision-makers. Certainly in Senegal, like everywhere else, IDRC’s capacity building projects at CADU were carried out in very different contexts in terms of demand and interest by public decision-makers. For example, the MIMAP and SISERA projects, known for their positive effects, had the benefit of a context in which decision-makers and donors could make immediate use of new capabilities, e.g. to develop strategies for structural adjustment or to monitor poverty reduction strategies. On the other hand, we were told, some projects encountered an initial response that was much less favourable; this was the case with the *Integration of ICTs in Local Government* project, which seems to have been aimed more at the next generation of public policies. Does this mean that projects of this kind had less success? Clearly not, but their capacity to influence policy was more modest and any appreciation of their relevance should take that variable into consideration.

According to respondents, IDRC’s proximity meant better guidance and better project implementation because it made it possible to:

- Know the project manager personally
- Avoid turnover among project managers because many were Senegalese
- Settle disputes swiftly and in person, clarifying misunderstandings more quickly
- Involve IDRC more often in important occasions during projects, and in official ceremonies
- Encourage dialogue between the director of WARO and the president of CADU, facilitating crisis resolution on problematic projects
- Correct mistakes or problems expeditiously
- Increase the frequency of formal and informal meetings

“At the time, a large proportion of the people who used the cafeteria on the top floor of the WARO building consisted of CADU professors. This made it possible to exchange and discuss informally, in other words to create informal networks. But for several years now the cafeteria has been closed to CADU professors (allowing greater numbers of CADU players to benefit). In the same way, the WARO library was highly appreciated by the students (i.e. future researchers) as it was by CADU professors. That enabled 1) access to IDRC research, 2) informal links between people at the two institutions; and 3) a better understanding of IDRC’s research techniques.”

WARO respondent

Context is important and an analysis of 22 IDRC-supported projects reveals that policy windows range from being wide open (where there is clear demand for the research in government and among policy-makers) to fully closed (where there is government disinterest or even hostility) to the ideas behind the research. However, there is also room to manoeuvre, and over time projects may find ways to open previously closed policy windows in the context of the decision process.

Fred Carden, Policy Paradox ¹⁷ (summary of Chapter 4 of the electronic version)

4.5.3 Effect on IDRC of its Relationship with CADU, and Relations

Between CADU and IDRC

IDRC and CADU will soon have achieved nearly twenty years of cooperation on a wide range of projects. CADU acknowledges that throughout this period it has had the benefit of a constant partner, one that is respectful of local conditions and is anxious to find solutions that are borne of and developed by the community. The relationship between the two organizations is characterized by both professionalism and friendship, and IDRC acknowledges that working with CADU, its researchers, faculties and associated centres, has been enormously rewarding. One result is that IDRC has developed extensive knowledge about the problems and solutions of development, and every project has allowed both CADU and IDRC to understand a little bit better which approaches are best for development in Senegal.

Beyond the repercussions for all sectors of IDRC programming, we would like to focus on three lessons learned that have helped IDRC to gradually improve its approaches to research capacity building.

Distinguish between the success of research and success in capacity building

Through its many projects with CADU, IDRC has come to understand that a successful project is no guarantee of research capacity building, and that the reverse is also true: there can be profound capacity building without the research itself having been particularly impressive. This has been mentioned on several occasions by IDRC's Evaluation Unit. The "project trap", the temptation to be satisfied with the results of a project, has been the bane of both WARO managers and other IDRC players who have had to broaden the scope of intervention in order to have any hope of truly affecting research capacity at the organizational level.

Recognize the importance of clearly understanding an organization's needs

With projects like SISERA and MIMAP, IDRC recognized the importance of providing the organization with what it really needed in order to conduct research. It must be remembered that SISERA's inception coincided with IDRC's research on organizational performance in the region. This research confirmed the hypothesis that organizational capacity building implied the development of management capabilities, organizational culture, the ability of an organizational unit to mobilize resources, and so on. As one of the subjects of this examination of organizational performance, CREA was a contributing influence in the fact that IDRC subsequently enriched its initiatives in research capacity building.

"From the outset, we were aware that if we didn't support CREA by giving it the basic essentials for work to be done in acceptable conditions, the whole project would fail. Then it became clear that for CREA to function, its managers had to learn to manage better, so the project offered help in different areas of management. That's research capacity building too, and it goes way beyond funding the doing of research."

A WARO manager

¹⁷ The Policy Paradox in Africa – Under the direction of Elias Ayuk and Mohamed Ali Marouani, forthcoming, Sage Press, New Delhi, 2008

5. Reflections for the Future

During our interviews, respondents made a number of suggestions for the future, while noting that, generally speaking, IDRC should continue what it was already doing since, on the whole, its current modalities and approaches were giving very good results. Combining our own analysis with their suggestions, in this section, we present a few avenues of reflection for the future.

5.1 Strengths and Weaknesses

It is clear from the thoughts our respondents shared with us that IDRC's most important strength is the enormous **credibility** it enjoys, not only with CADU but with all players in Senegal who are involved with research. IDRC's reputation as a preferred partner is based on three strong points that were mentioned repeatedly by CADU researchers, governmental partners and the few representatives of civil society. First is the quality of the interventions conducted by high-calibre managers working with CADU in a spirit of mutual respect. Second, IDRC maintains its support through thick and thin, despite whatever crises, difficulties and failures may occur. Indeed, the long relationship between IDRC and CADU is a cloth woven of both highly successful and relatively unsuccessful initiatives. Respondents spoke for example of the importance of maintaining support for CREA over the years, despite the changes it had gone through. The third strong point is IDRC's ability to put people together (interfacing), a role it plays with no other agenda than that of promoting solutions to development problems through research.

A second strength IDRC possesses, of a more practical nature, is its **quick and simple mechanisms for project approval**, free of the useless bureaucracy that characterizes the approaches of CADU's other research partners.

IDRC's third strength is the **interactions between IDRC project managers and CADU researchers**, allowing for verbal or written exchanges throughout the life of a project, exchanges that in themselves represent capacity building for the researcher. CADU researchers indicated that they had contacted IDRC project managers an average of five times, for the purpose of discussing: a) the idea of the project, b) the project design document, c) the presentation of the project proposal, d) interim project reports, and e) post-termination hindsight. At each of these stages, the IDRC project manager made comments and suggestions while always being receptive to what the researcher had to say, the primary objective being to obtain a quality project. Certain women researchers at CADU also expressed appreciation for the sensitivity of IDRC managers to the **integration of the gender question** into IDRC projects, and for the absence of sexism.

Among the weaknesses identified by CADU researchers, IDRC does not make enough of item (e) above, post-termination review. Project evaluations are not shared with researchers and their colleagues in any systematic way and, except for SISERA, few of the researchers had any idea whether their project had been evaluated, and if so, what recommendations might have been made. There should be more emphasis on discussing project evaluations with the researchers concerned, since the lessons learned thereby would obviously benefit their future projects. Also, it was clear to us that both researchers and CADU senior management often had little knowledge or comprehension of **IDRC's organizational objectives in terms of research capacity building**, a state of affairs that could easily be corrected.

5.2 Thoughts on Research Capacity Building Activities for Researchers

Both CADU researchers and WARO managers emphasized that certain factors are critical to increasing the research capacity of researchers. Beyond the pursuit of funding and a bigger budget for projects by CADU researchers, some important points were mentioned, as explored below.

Train researchers in ancillary skills

More and more research projects are carried out over a period of months, if not years, requiring careful management of material resources. The researchers we met stressed the need for young researchers to be given training in project management to help them to better organize their work and make optimal use of resources.

Lower the language barrier between Francophone researchers and others

Many CADU researchers lamented the isolation caused by the language barrier. Apart from the few who have done post-graduate studies in North America, most teachers and researchers have little English, and benefit little or not at all from potential exchanges with colleagues at English-speaking universities in Africa, or from research available on the Internet. Several indicated that they had to wait months before obtaining documents in French, translation being slow and costly. Measures could be taken to help lower the language barrier, starting with inciting CADU researchers to improve their knowledge of English. One suggestion to this end was to provide grants whereby Senegalese researchers would pursue research in English-speaking countries in the sub-region; such grants could specifically include a language study requirement. A second type of action would focus on reducing the fragmentation between the Francophone and Anglophone research communities. Suggestions included offering simultaneous translation at seminars and workshops to make it easier for CADU researchers to network with English-speaking colleagues; and funding the translation of CADU articles into English to facilitate dissemination in English-language publications.

Foster an internal culture for research at CADU by exposing researchers to other teaching models

One of the elements we noted in our review was the legacy of teaching through formal lectures, which is still very strong at CADU. Added to the inescapable reality of growing numbers of students per class, the French tradition puts more emphasis on teaching than on research. According to our respondents, this tendency is still very strong at the B.A. level, though gradually diminishing in M.A. and Ph.D. programs. A transition to a culture with a stronger orientation toward research would have definite advantages. As a means to this end, respondents suggested providing grants for young CADU researchers (as future teachers) to pursue their work at universities both North and South where the emphasis on research is greater, and where teaching methods leave more room for innovation and experimentation. It appears that French cooperation and the AUF have begun to favour this type of support.

“We now have a generation of researchers who were trained in North America and who understand not only that research is as important as teaching, but that it requires an approach that allows for creativity, innovation and disagreeing with the teacher’s opinion. Without these pedagogical changes, we would still be locked into more traditional approaches where the role of a young researcher is to follow the teachings of the master.”

5.3 Thoughts on Research Capacity Building at the Organizational Level

All of our respondents agreed that sustainable research capacity building depends on developing capacity at the organizational level, that of faculties and research centres. Many of IDRC’s interventions with CADU included just that among their objectives.

Explore the links between particular types of capacity building intervention and the structure and typology of organizations

We think it would be interesting for IDRC to examine the connection between the nature of its organizational capacity building interventions and the types of organization it supports. The six case studies of which the present study is one will comprise a typology of approaches for strengthening organizational capacity, approaches that have been applied to different types of organization: networks, universities, governments, research centres. An important question that should be explored is whether these approaches are the most effective for each of the organizations concerned. Given their nature – we used Mintzberg’s typology but others would be equally valid – would different approaches be better?

Also, since research at CADU is now structured around doctoral schools, this suggests intriguing avenues of reflection for all of CADU’s future partners, e.g. on the effects of that structure on organizational relationships. How does funding for these doctoral schools, in the context of CADU’s *Licence-Maîtrise-Doctorat* reform, affect future partnerships between CADU and donors? As seen with the MIMAP project, capacity building for individuals is only good for an organization if the latter can retain its newly trained researchers. Without adequate management systems to curb the brain drain and reduce rates of turnover, individual capacity building means always having to start over. Is there a need to support the doctoral schools in strategic planning to better face such challenges?

Focus on both infrastructure and management capabilities

The traditional approach of donors interested in research has always been simply to fund specific research projects. There is far less interest in funding the acquisition of management skills or basic infrastructure that would enable local researchers to pursue their own research.

But at CADU as at all universities, researchers work in organizational units – faculties, research centres, laboratories – which in the absence of adequate equipment and leadership cannot be productive environments.

The hypothesis at the basis of IDRC projects like SISERA is that the best research comes from organizations that have a solid institutional foundation. Our respondents agree with that hypothesis wholeheartedly. The positive effects of this approach could inspire future projects between CADU and its research partners. For example, support for a centre or faculty should include the improvement of tools and basic infrastructure. Besides facilitating the work of researchers, such measures would be a persuasive argument for continuing to do research at CADU, as opposed to switching to another (better-equipped) university. Additionally, organizational support should be directed to developing multiple dimensions of management, including leadership, monitoring and evaluation systems, strategic planning, the improvement of work processes, mediation and interpersonal conflict management, financial management and the mobilization of resources.

IDRC has invested significant resources in elevating management skills at CREA and other African centres (under the SISERA project). In the past these efforts enabled CREA to produce excellent results, as we know. Perhaps when there are changes in leadership at these centres more attention should be paid to the transition, to ensure the sustainability of their performance.

Facilitating periods of transition

Despite the overall success of capacity building activities at the organizational level, transitional periods at CADU's centres and faculties have presented serious challenges. For example, the question of CREA's present capabilities is of great concern. Though IDRC has stayed faithful to its commitment to this centre, the latter became vulnerable when its director left and researchers scattered to other institutions. This concern is all the greater in the context of a continent suffering from a dearth of qualified resources, since Senegalese researchers in general and those at CADU in particular are often tempted to take up more attractive offers elsewhere.

Spread out funding for research centres over longer periods

As noted by managers and researchers involved in the SISERA project, a centre like CREA may have limited capacity to absorb the resources allocated to it. For this reason, it would be better for funding to be spread out over longer periods to allow such centres to pursue their activities at a more realistic pace.

5.4 Thoughts on Research Capacity Building at the Institutional Level

Maintain the present approach for the choice of research themes

The philosophy behind all of IDRC's projects at CADU has been to avoid any imposition of research themes, encouraging proposals that are intimately linked with local needs. Our respondents were unanimous in saying that this approach has done much to alleviate what they called CADU's identity crisis. By allowing researchers to choose their own themes according to Senegalese priorities, not as a function of external priorities, IDRC has made it possible to counter the identity crisis in higher education that prevails in other countries of the South where research priorities are dictated by financial partners. Research in Senegal is thus more relevant and has greater influence.

Pursue approaches that foster dialogue between supply and demand

As we noted on several occasions, CADU's research capacity would be greater if the results of that research were utilized more by national decision-makers. Some progress has been observed in recent years, e.g. in the role played by CREA or CADU researchers in the ICT sector. But Senegal does not yet have a national culture that is favourable to Senegalese research, and developing such a culture exceeds the mission and the mandate of IDRC. Among other things, it would mean improving the organization of Senegalese research to avoid duplication. A culture favourable to research would attach greater value to CADU researchers while preserving their independence, creating a climate in which research would be encouraged and supported at once by political figures, public opinion and the media. But in Senegal, as in most countries, there is a natural tension between the independence of research and the needs of society, a tension that can only be assuaged through constant dialogue.

IDRC has taken a number of steps to make CADU research more relevant, and as several respondents noted, has begun initiatives to encourage dialogue so that stakeholders in civil society, the private sector and government will be able to make their needs known and, in return, appreciate the contributions of CADU research.

This means that ties between local needs and CADU research will be that much stronger if WARO remains attentive to national priorities. In this regard, IDRC has taken a number of fruitful steps. For example, WARO's meetings with a group of advisors who are both independent and well-informed about Senegalese priorities are an interesting initiative that will help ensure a good fit between Senegalese reality and projects carried out with CADU. In the same manner, seminars or workshops that have brought together various stakeholders around a common problem have facilitated the linkage of research themes to national needs. The government officials we met had high praise for WARO, which they said invests the time it takes to cultivate links with various branches of government in order to better understand local problems. WARO managers also noted the cogency of initiatives to render research products in layman's language, for example short, simple publications designed for people who need to make decisions based on those results. We read with interest research summaries from CREA that in a few pages convey the essentials without requiring the reader to go through the entire analysis leading up to the results.

“When a decision-maker has to make a decision about some problem, whether it concerns health, education or the new technologies, he needs access to concise documents that tell him what's what and can be read in a very short time. Afterwards, if he wants, he can ask to see a more detailed version. So CADU research results have to be accessible at different levels: for professional researchers, for the media, for politicians and for the private sector. For example, at a seminar with representatives from the private sector, business leaders wanted to know if a particular technology would help them increase their profits; political decision-makers wanted to know if the same technology could be easily introduced in remote areas that are less well served in terms of connectivity; and journalists wanted to know in a few words if the same technology could improve living conditions in a specific region.”

WARO manager

We are well aware that work at the institutional level, and the contribution to transforming the demand for research, are made vastly easier by WARO's presence in Senegal. In our discussions with respondents who worked on the SISERA project, it was noted that on-the-ground knowledge of that quality was much more difficult to gain in the other countries involved in the SISERA project.

5.5 Other Considerations for IDRC

Beyond the avenues of reflection proposed above with regard to capacity building at CADU, some proposals were also made whose scope would go beyond Senegalese borders.

Would it make sense for example to invest more in research about research, to develop more rigorous data on the conditions in which research is conducted, on factors that contribute to excellence, on the impact of incentives and dissuasive measures? There appears to be a need for better understanding of the political dynamics of research systems, both in universities and in their political and social context.

It could also be interesting for IDRC's Innovation, Policy and Science (IPS) program to examine how teaching systems facilitate capacities that have a bearing on research.

6. Conclusion

As we conclude this study of IDRC's initiatives in capacity building at CADU, our assessment is highly positive. Over the last twenty and some years, IDRC has established personal and organizational links with CADU and has increased its legitimacy as a privileged partner, not just at CADU but throughout Senegal. Its approaches have evolved over the years, having been initially focused on particular research problems but gradually evolving toward organizational and institutional initiatives to make research results more relevant. While its local presence, through WARO, has contributed to this high-quality work, other factors have also been cited, in particular IDRC's respect for the country's development priorities and the ultimate concern in all of its actions for encouraging local solutions to development problems. The avenues of reflection for the future that we have proposed should be read as possible fine adjustments to work whose very high quality is already recognized.

Appendix I Terms of Reference

1. Background

Over the past several decades, IDRC, in line with many development agencies, organizations and donors, has grappled with the issue of how to assess capacity building initiatives. Many of these agencies have struggled with how to articulate and document the complex array of results of their capacity building activities. Part of this difficulty lies in the fact that there are few systematic reviews of how development agencies construct the concept of capacity building in order that they may systematically look at how this construction leads to results. While there is a great deal of information regarding development projects that have attempted to build capacity, there is a dearth of information regarding how development agencies approach the concept of capacity building.

In response to the above considerations, IDRC's Evaluation Unit (EU) is conducting a strategic evaluation to investigate the Centre's contributions to the development of capacities of those with whom the Centre works. The evaluation aims to provide IDRC's own staff and managers with an intellectual framework and a useful common language to help harness the concept and document the experiences and results that the Centre has accumulated in this domain. Specifically, the strategic evaluation focuses on the processes and results of IDRC support for the development of its southern partners' capacities – what capacities have been enhanced, whose, how, and how effectively.

During the first three phases of this strategic evaluation, assisted by the consultant firm Universal Management Group, significant progress has been made in (1) defining what IDRC means by “building” or “developing” capacities and in sharpening understanding of *how* IDRC supports capacities and with *whom*; (2) developing an initial set of typologies that will assist IDRC staff and partners in conceptualizing, planning, monitoring and evaluating capacity development; and (3) elaborating a list of “good practices” that capture some of the elements of IDRC's support that staff and partners view as being critical to building research organizations and systems.

Initial conceptual work developed in the first phases of the strategic evaluation indicates that “for IDRC staff, capacity building is an essential variable in their approach to development. With a focus on process and on learning-by-doing, and especially on sustaining long-term personal relationships, IDRC is fixed on the value of the individual partner (the researcher or group of researchers) as the key component in capacity building.”

IDRC's approach to capacity building was found to be normally instrumental or functional in nature, and focused on tangibles, such as professional competencies, capabilities, and the tools needed to conduct research. These skills included the ability to identify research problems, to design and implement projects, to monitor and evaluate, to achieve good financial management, to link with other researchers and with donors, to publicize results, and so on. For IDRC therefore, capacity building means working with partners to conduct better research in a specific field and that any change that occurs as a result of this capacity building is at the problem or research area level rather than at the institutional or systems level. And yet, analysis undertaken during the first three phases of the strategic evaluation also indicates that IDRC partners are always connected to others within the research problem or system. As such, at IDRC, capacity development often takes a *systems approach*. In other words, it not only addresses the individual(s) directly involved in the project(s) or program, but also looks at how these individuals are connected to others: other individuals, organizations, and/or networks.

It is clear that it is only through examining the dynamics and evolution of how all the involved parties and communities work together to solve the development challenge that we will better understand how IDRC supports *the capacity to do research-related activities*. In light of these findings, IDRC has a growing interest in understanding how its capacity support (through projects or other activities) at the individual level – individuals and/or teams/groups is able (or not able) to influence change within their organization or network. IDRC would also like to have a deeper understanding of how individuals have the capacity to build or establish relationships and partnerships to influence change through research, and how these partnerships and relationships interact within the various settings (organizations, networks).

With a view to increasing the Centre’s ability to capture and track capacity changes in terms of the dynamics and interactions between individuals, organizations and networks and to understanding if and how IDRC contributes to capacity changes, phase 4 of the strategic evaluation will focus on the development of six (6) organizational case studies. Case studies will better ground the findings of phases 1 to 3 in specific, in-depth experiences.

2. Scope and Methodology

The case study will work consist of a purposeful sample of six (6) organizational case studies, chosen on the basis of maximum variation. Maximum variation sampling aims to capture and describe the central themes that cut across a great deal of variation. For small samples, it turns the apparent weakness of heterogeneity into a strength by applying the logic that “any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon” (Patton, 2002, 234-235). In this strategic evaluation, it is expected that this approach will bring to the fore important aspects of IDRC’s experiences and abilities for supporting research capacity in different types of organizations and research environments.

Cases will be chosen in order to capture how, over time, IDRC’s sustained support contributes to capacity development at the individual/group, organizational and network levels in the field. The organizational case studies will examine different types of organizations in different geographic regions and with diverse sectoral concentration, which have received significant IDRC support over the last ten years.

Organizations within the top fifty (50) Southern-based recipient organizations of IDRC financial support since 1996 will be selected for this strategic evaluation. Being longitudinal in nature, the case studies will examine the cumulative results of IDRC’s significant investment (more than CAD\$2 million in each case) extended through a number of projects or capacity support interventions, by different IDRC programs over a significant period of time. The organizational case studies will examine both the *processes* and the *results* of capacity development with Southern partner organizations.

The case studies will present rich narratives of different capacity development processes. In IDRC’s view of *complete capacity*, there is a need to pay attention to, and fund multiple functions to enhance, the capacity to do research-related activities, including how to conduct, manage, and communicate research. For IDRC, communicating research goes beyond simple presentation of results; it involves dissemination strategies that include effective approaches so that research can be taken up and used by policymakers, communities, private sector, NGOs, governments, other researchers, etc. to find solutions to their development problems. Analyzing *complete capacity* will bring the evaluator into contact with the multiple IDRC areas that provide capacity development support including Programs Branch, the Evaluation Unit, the Partnership and Business Development Division (PBDD), Research Information Management Services and the Grants Administration Division (GAD).

These narratives will be developed through (1) a review of documents including organizational assessments (Institutional Risk Profile), project design documents, monitoring documents (technical reports, trip reports, correspondence etc.) and project reports, along with where they can be located; (2) interviews with project leaders, project participants and other key informants in the organizations being evaluated; (3) interviews with relevant IDRC staff from programs, grant administration and financial management (GAD, regional comptrollers) and units involved in capacity development work with the organizations being evaluated (e.g. responsible program staff, senior IDRC managers, Evaluation Unit, Library, PBDD, etc.). Additional research components (e.g. internet or academic literature reviews, focus groups, surveys, etc.) can be added as needed by the case study author to answer the evaluation questions.

The case studies will need to explore what collaborative efforts were established and achieved throughout the projects/interventions being examined and determine whether these collaborations were established to achieve particular development tasks: to do research, to manage research or to communicate/disseminate research to others to use and/or apply in policy and/or practice. Since our understanding of capacity is that it changes and shifts over time, the case studies will also need to illustrate how these collaborative efforts evolved and shifted over time, and if and how the research problem also evolved or shifted over time.

Each of the case studies will cover a range of projects and activities in the same organization in order to demonstrate the rich diversity of capacity support interventions that are employed by different IDRC programs and units. This diversity will assist IDRC to look back at its collective work with the organization in question and to evaluate – in its own terms – the Centre’s ability to apply what has come to be seen as its own tacit list of “good practices” for capacity development (see Appendix).

By collecting data at the lowest level of analysis (the project or capacity development intervention), the case study authors will need to layer or “nest” these units in order to aggregate their data analysis upwards to come up with findings at the organizational level. The end goal is not to measure the partners’ performance *per se*; rather, it is to explore what links can be made between partners’ performance and the level/type of capacity development support received from IDRC. In framing the case studies around the five data clusters mentioned below (environment, intention, description, performance and findings), findings will test key corporate assumptions and should provide information and insights into *what and how* we are doing under *different working conditions*, *how we understand* the concept of capacity development, *how we can do better*. In all cases, the focus of the analysis should be centred on capacities related to research for development as this is IDRC’s mandate.

3. Use of Organizational Case Studies

As a central component of this strategic evaluation, the case studies will be used by IDRC staff to support the design, implementation, monitoring and evaluation of capacity development projects and activities. The case studies will also be used by IDRC senior managers to better understand IDRC’s particular approach to capacity development, a key corporate objective.

4. Case Study Data Collection Areas:

a. Examination of the context in which development research is conducted

- Lead questions
 - How does the overall legal, political, social/cultural and economic environment influence the partner organization’s ability to engage in research for development?
 - What factors have most inhibited or enabled the uptake of capacity support for

research?

- Sub-questions
 - How is the organization affected by the administrative/legal environment? (Does it have a clearly defined legal framework? Is it affected by bureaucracy?)
 - Is the organization considered influential by others in its external environment?
 - How is the organization affected by the political environment (stability, corruption, links to government, links to civil society)?
 - Does the organization take into account the effect of culture on possibilities for access to and participation in capacity development initiatives (e.g. religious/ethnic/gender/class customs and biases, nepotism, violence and crime)?
 - Does the organization have access to a predictable pool of qualified human resources?
 - Does economic policy support the organization’s ability to acquire technologies and financial resources for research capacity building?
 - Are there other partnerships that have been formed with other donors, researchers and civil society stakeholders? For what purpose?
 - Is there adequate physical and technological infrastructure to enable the partner organization to make the best use of capacity development support?

b. Intention at the outset of the relationship between IDRC and the partner organization

- Lead questions
 - What were the intentions/expectations of IDRC and the partner organization in terms of capacity development at the outset? How were these intentions/expectations to be accomplished?
 - To what extent were the intentions explicit, logical (i.e., based on a theory of change), coherent, appropriate and connected to the research context and the specific research problem?
- Sub-questions
 - What led IDRC and the partner organization to work together for this project?
 - What did each one hope to accomplish?
 - Did these intentions change over time? If so, how?
 - If there was an explicit objective to build capacity, how was this determined and formulated? If there was no explicit or implicit objective, why not?
 - Who was involved in the building of capacities – individuals, organizations, networks?
 - What was the overall understanding of how capacity changes?
 - How was the approach to capacity building designed? Was there a set approach or was it a “mixed bag” of approaches?
 - Did it fit with any conception of “complete capacity” – or was *conducting the research* considered good enough?

c. Description of capacity building interventions

- Lead questions
 - What capacity building strategies were used, and how were they implemented? Why were these strategies chosen?
 - How relevant, strategic and effective were the capacity development strategies?

- How did these strategies evolve over time? Why did they do so?
- Sub-questions
 - What actually happened? Why was that the case?
 - What kinds of capacity were addressed (e.g. to do research, to manage research, to communicate/disseminate research)? Through what types of intervention?
 - How relevant, appropriate and effective were these interventions to the capacity problem or research problem being addressed?
 - Did the capacity building approach undertaken through the project/intervention gradually transform over time? If so, how? With what results?
 - What outputs were produced by the project/intervention? At what level? (Individual, organizational, network?)
 - What (if any) collaborations (partnerships, relationships) were achieved by the partner through the project/activity? What roles did those involved play? How did these change over time? Did the relationship with IDRC lead to other/new collaborations with others?

d. Performance and continuity of the relationship between IDRC and the partner organization

- Lead questions
 - What were the outcomes of IDRC’s support, in terms of individual and organizational capacity and the conduct and uptake of research?
 - What factors helped/hindered the achievement of results (factors related to IDRC or others)?
 - What was the effect on IDRC of its relationship with the partner organization?
 - What is the ongoing nature of IDRC’s current relationship with the partner organization?
- Sub-questions
 - What capacity changes/outcomes have occurred in the partner organization? (Improving/expanding research capacities, generating new knowledge, affecting policy and/or practice? Other?)
 - What changes (if any) have occurred in IDRC as a result of the capacity support relationship between the two?
 - Did the partner organization’s perception of a research or development problem change over time? If so, how? To what extent was this change of perception due to the intervention(s) of IDRC?
 - Are there any significant cases in which the building of capacities at the researcher level has led to macro change at the organizational level? Are there any significant cases in which the opposite has been true?
 - Has IDRC capacity development support allowed researchers to take on a leadership role in their organization?
 - Has the building of capacities (individual, organizational, network) contributed to the ability of an IDRC partner organization to fulfill its mandate? If so, how?
 - Did the partner organization’s definition of “capacity” change over time? If so, in what way?
 - Did IDRC staff cooperate and consult with one another in their dealings with this

organization? If so, how?

- What other factors affected capacity building with this organization (internal context of IDRC, IDRC program objectives, other initiatives under way – both those of IDRC and other donors)?
- Has IDRC’s support for capacity building contributed to systemic changes in the research community? Has it played a role in “influencing established (and often firmly held) paradigms, practices, attitudes and behaviours” (Adamo, 2004)? If so, how?

e. Findings

- Lead questions
 - What are the strengths and weaknesses of IDRC’s approach to capacity building?
 - How could IDRC improve the way it supports capacity building in this organization?
- Sub-questions
 - How could IDRC be as effective as possible in helping organizations respond to challenges and changes in the external research environment?
 - How could IDRC address the capacity needs of organizations – while continuing to support individual researchers and research groups?
 - What changes (if any) should IDRC consider incorporating in its plans for capacity building support to the partner organization?

5. Responsibilities and Tasks

The case study authors will complete the following tasks:

- Case study design and management
 - Review of documents including organizational assessments (Institutional Risk Profile), project design documents (Project Approval Documents, correspondence between IDRC and partners), monitoring documents (technical reports, trip reports, correspondence etc.) and project reports (technical reports and Project Completion Reports); any other documentation relevant to the evolution and status of IDRC’s organizational relationship on issues of capacity development with the case study organization.
 - Travel to Ottawa and participate in a two day methodology workshop being organized by IDRC’s Evaluation Unit on July 3-5, 2007. The objective of the methodology workshop is two-fold: First, to brief case study authors on IDRC’s objectives and rationale for this strategic evaluation and ground the authors’ understanding and development of the case studies on the knowledge base of progress (in both conceptual and practical terms) achieved under the first phases of the evaluation. Second, by addressing any unanswered questions or doubts that the authors might have, the methodology workshop will provide a space for collective author feedback to IDRC on the direction of the case studies and generate a common understanding of IDRC expectations around case study objectives, questions, content and analysis.
 - Based on the Terms of Reference (TORs) including the lead questions noted under the data clusters outlined above, the reading of the organizational case study file, and discussions at the methodology workshop, the consultant will develop a case study work plan (one for each case study) for submission and approval by IDRC, prior to beginning data collection in the field. The work plan should include a description of the proposed case study methodology and data collection instruments, together with a work timeline, and should flag any outstanding questions requiring attention or

clarification from IDRC's Evaluation Unit.

- Collection of data
 - Compile a list of key case study informants including, but not limited to: project leaders, project participants and other key informants in the organizations being evaluated; relevant IDRC staff from Programs Branch, Grant Administration and financial management (in Ottawa and regional comptrollers) and units involved in capacity development work with the organizations being evaluated (e.g. senior IDRC managers, Evaluation Unit, Library, PBDD, etc.); and external actors including other donors and stakeholders who have interacted with the case study organization in a capacity development capacity.
 - Using a preferred qualitative and/or quantitative collection method, collect any additional data (either inside or outside of IDRC), that the case study author deems appropriate and necessary for answering the evaluation questions being posed by IDRC.
 - Travel to the field in order to interview key informants. Interviews should normally start with from those most directly affiliated with the project to those purported to have been affected by the outcomes, or who have used them in some way. Because there is inherent bias in interviewees to present findings in the best possible light, triangulation of data sources is crucial. Every effort should be made to ensure that interviews are conducted with representatives of at least three of the main groups involved: project implementers in the organization, beneficiaries, IDRC and where applicable, related project participants (other funded or departmental studies which have been linked to the project). The consultant will normally have an opportunity for follow-up visits for data verification or further data collection where warranted.
 - Participate in a validation workshop in a location to be determined (most likely Ottawa), at which the consultant will make a brief presentation, describing the case and indicating preliminary findings. The consultant may be asked to facilitate the data analysis or to be an active participant in the process. Following the workshop, the team may determine that it is advantageous to follow up the findings with further data collection in the field, either for the introduction of new respondents or to gather data in areas not yet addressed in the case.
 - Finalize the case study report based on inputs and any further verification carried out, and submit final satisfactory reports in hard copy and electronic format in accordance with the schedules outlined for each case study. Upon completion of all the case studies, the Evaluation Unit may invite the consultant to participate in a cross comparative case study analysis of the data.

6. Timeline

The timeline will vary for different case studies due to variations in authors' abilities to travel to the field and/or IDRC regional office abilities to accommodate author visits. Overall, first drafts of the case studies are expected in November 2007. The Evaluation Unit plans to hold a validation workshop with case study authors, IDRC staff, select partners and other interested stakeholders in the first months of 2008. Final drafts are expected by the end of first quarter in 2008.

Appendix II Research Questions

Theme	Principal Question	Sub-Questions (Examples)	Sources of Information	Information Collection Methodology
<p>1. Context of development research</p>	<p>In what way does the political, socio-cultural and economic context affect the capacity of CADU to undertake development research?</p> <p>What factors have had the most effect (whether positively or negatively) on CADU's capabilities in this area?</p>	<p>What are the principal external factors affecting CADU (political, economic, cultural, etc.)? Is CADU governed by an administrative charter clearly stating its mission and legal and administrative provisions?</p> <p>Is CADU an influential university in Senegal? In West Africa? Does it have a good reputation?</p> <p>What are the principal changes that have occurred in the area of research in Senegal? What role does CADU play in university research in Senegal?</p> <p>Is there a large pool of researchers (national or regional) on which CADU can draw in order to conduct research?</p> <p>Does CADU have the technological resources needed to conduct research?</p> <p>What is the nature and quality of CADU's research partnerships?</p> <p>Does CADU have adequate infrastructure (computers, laboratories, etc.) to conduct research successfully?</p>	<p>Documents: background document on CADU</p> <p>Respondents: CADU employees, experts in doctoral-level education, donors supporting education in Senegal</p> <p>Observation: during the trip</p>	<p>Documentary review</p> <p>Interviews</p> <p>Field trip</p>
<p>2. Building university capacities</p> <p>- Definitions</p>	<p>How do we define developing the capacities of a university?</p>	<p>What existing conceptual models are there on developing the organizational capacity of a university?</p> <p>What approaches in university capacity building have worked?</p> <p>Is there anything particular about universities that should be addressed by approaches in organizational capacity building?</p>	<p>Document: various readings on the problems of African universities</p> <p>Respondents: experts in post-graduate education in Africa</p>	<p>Interviews</p> <p>Documentary review</p>

<p>3. Initial intentions (at the outset of the CADU-IDRC partnership)</p>	<p>What were the intentions and expectations of each partner in terms of developing CADU's organizational capacities?</p> <p>Were their intentions about organizational capacity building clearly stated and clearly understood?</p> <p>How were these intentions supposed to be accomplished?</p>	<p>What led to the creation of the partnership between IDRC and CADU?</p> <p>What were their respective expectations in terms of organizational capacity building?</p> <p>Did CADU and IDRC have an explicit objective regarding organizational capacity building at CADU? If so, what approaches/strategies had been planned for the achievement of these objectives?</p> <p>What set of practices did IDRC use to develop organizational capacity at CADU?</p> <p>Were these capacity building approaches aimed at a sub-unit of CADU or the university as a whole?</p>	<p>Documents: project reports and documentation</p> <p>Respondents: IDRC Dakar and Canada.</p>	<p>Documentary review</p> <p>Interview</p>
<p>4. Description of organizational capacity building interventions</p>	<p>What strategies for organizational capacity building did IDRC employ? How were they implemented? Why were they chosen?</p> <p>Were these strategies effective? Relevant? Did they have the expected outcomes?</p> <p>Did these strategies evolve over time?</p>	<p>What happened and what outcomes were achieved?</p> <p>What organizational capabilities were targeted? Conducting research, managing research, communicating the results of research? What mechanisms were used for each intervention?</p> <p>Are the various respondents aware of the specific link between each intervention and the development of CADU's organizational capacity?</p> <p>Did CADU's approach toward capacity building evolve over time? If so, in what way?</p> <p>What effects did IDRC's initiatives have on the organizational capacity of CADU? At what level (individual, organizational, network)?</p> <p>Has CADU created links with other organizations through IDRC projects? If so, what are they? Have these links evolved over time? How have they contributed to developing the organizational capacity of CADU?</p>	<p>Documents: project files and reports</p> <p>People: IDRC Dakar, CADU employees, project beneficiaries</p>	<p>Documentary review</p> <p>Individual and group interviews</p>

<p>5. Performance and sustainability of IDRC-CADU relationship</p>	<p>What were the effects (both on individuals and in terms of research) of IDRC's initiatives at CADU?</p> <p>What factors (positive and negative) contributed to these effects?</p> <p>Has IDRC been influenced by its relationship with CADU? In what way?</p>	<p>What specific changes can be attributed to IDRC's initiatives at CADU?</p> <p>How has the definition of research changed over time at CADU? Have IDRC's interventions influenced these changes?</p> <p>Have capacity building efforts at CADU had any effects at the organizational level? If so, which ones? Have their effects been more on the level of individuals and departments?</p> <p>Have IDRC's initiatives in capacity building at CADU increased leadership by CADU researchers? Have they contributed to enabling CADU to achieve its objectives?</p> <p>Have initiatives to develop the capacities of CADU had any repercussions on research in Senegal?</p>	<p>Documents: articles on CADU, documents in the project files</p> <p>Respondents: IDRC Dakar, Ottawa, education experts</p> <p>Observations: during the Senegal trip</p>	<p>Documentary review</p> <p>Interviews</p> <p>Field trip</p>
<p>6. Recommendations</p>	<p>What are the strengths and weaknesses of IDRC's approaches in organizational capacity building with CADU?</p> <p>How could they be improved?</p>	<p>How could IDRC support the research efforts of organizations like CADU?</p> <p>How should IDRC change its approach to organizational capacity building?</p>	<p>All of the sources listed above</p>	<p>Summary of information</p>

Appendix III IDRC Investments in Projects with CADU

Title	No.	Launch	Status	CAD
National Languages Policies in Education Systems (Burkina Faso, Ivory Coast, Guinea, Mali, Mauritania, Senegal) - Phase I	880204	05/07/1989	Finished	\$449,245
Sexually Transmitted Diseases (Senegal)	890022	01/10/1989	Finished	\$173,653
Teaching Documentary Data Processing (Senegal, Morocco, Canada)	881010	04/01/1990	Finished	\$803,285
Deforestation and Reforestation in Senegal	900020	10/04/1990	Finished	\$57,506
Estuarian Waters (Senegal)	890074	17/09/1990	Finished	\$23,989
Urban Domestic Wastewater Treatment (Senegal)	900153	22/10/1990	Finished	\$15,996
Women and Land Tenure Ownership (Senegal)	890260	14/12/1990	Finished	\$41,040
Quaternary Hydrogeology (Benin) - Phase II	891017	01/01/1991	Finished	\$375,105
Niayes Water Body Management (Senegal)	901004	01/03/1991	Finished	\$374,596
Grand Yaéré (Cameroun)	900003	01/04/1991	Finished	\$245,900
Red Algae (Senegal)	901024	01/04/1992	Finished	\$494,000
National Languages Policies in Education Systems - Phase II	931350	20/04/1994	Finished	\$374,098
Environmental Evolution of sub-Saharan Senegal (ECOSSEN)	931352	06/07/1994	Finished	\$330,744
Application of the Forest Code: Senegal	065013	27/07/1994	Finished	\$21,086
Pesticide Regulation (Senegal)	931005	16/09/1994	Finished	\$82,905
Institutional Support: CREA (Senegal)	065022	23/08/1995	Finished	\$240,750
Distance Learning: ICTs for Basic Education in Senegal	065223	17/03/1998	Finished	\$246,527
Information and Communication Technologies Resource Centre (Senegal)	065225	17/03/1998	Finished	\$207,564
Telemedicine / Telehealth in Africa - Phase I: Public Awareness and Pilot Projects	065296	26/08/1999	Finished	\$427,577
MIMAP Senegal	100121	22/06/2000	Finished	\$537,895

CREA Core grant	065077-038	2001	Finished	\$298,300
<i>Politiques de ressources publiques et la lutte contre la pauvreté</i> (Public resources policy and the fight against poverty)(CREA)	065077-042	2001	Finished	\$5,320
New Partnership for Africa's Development (NEPAD): Regional Activities (West and Central Africa)	101230	01/01/2002	Finished	\$50,000
<i>Cours de base sur la mesure et le diagnostic de la pauvreté</i> (Basic course on the measurement and diagnosis of poverty) (CREA)	065077-059	2002	Finished	\$69,460
Advanced Poverty Workshop (CREA)	065077-072	2002	Finished	\$63,100
CREA Policy Papers	065077-078	2002	Finished	\$28,380
ERNWACA pre-inaugural	065077-084	2003	Finished	\$35,260
CREA doctoral component	065077-089	2003	Finished	\$74,040
<i>Les déterminants de la demande d'éducation primaire et secondaire au Sénégal</i> (Determinants of the demand for primary and secondary education in Senegal)	065077-098	2004	Finished	\$93,117
ERNWACA CREA	065077-099	2004	Finished	\$328,350
MIMAP-Senegal - Phase II	102280	23/03/2004	Active	\$686,970
ICT Resource Centre – Phase II: Creating R&D Capacity	102542	20/07/2005	Active	\$274,300
Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal	102889	08/09/2005	Finished	\$14,450
SCAULWA 2005: Library Consortiums	103502	28/10/2005	Finished	\$12,644
Science, Media and Society: Methodological Workshop	103582	22/12/2005	Active	\$15,000
Integration of ICTs in Local Government in Senegal	103111	29/03/2006	Active	\$403,600
Institutionalizing Gender and Women's Rights and Citizenship at CADU (Senegal)	104029	16/10/2006	Active	\$331,100
TOTAL 1990-2006				\$8,306,852

Appendix IV Project Sample

* Projected dates

Project Name	Project No.	Year	CAD
Institutional Support: CREA	065022-001	1995 -1998	\$240,750
Information and Communication Technologies Resource Centre	065225-001	1998 – 2002	\$137,230
Distance Learning: Information and Communication Technologies for Basic Education in Senegal	065223-002	1998 – 2003	\$166,913
Telemedicine / Telehealth in Africa – Phase 1: Pilot Projects	065296-001	1999 – 2004	\$427,577
MIMAP – Senegal	100121-002	2000 – 2003	\$433,424
Secretariat for Institutional Support for Economic Research in Africa (SISERA)	065077-042	2001 – 2006	\$15,933
Secretariat for Institutional Support for Economic Research in Africa (SISERA)	065077-059	2002 – 2006	\$72,723
Secretariat for Institutional Support for Economic Research in Africa (SISERA)	065077-038	2002 – 2006	\$274,847
Secretariat for Institutional Support for Economic Research in Africa (SISERA)	065077-047	2002 – 2006	\$25,000
Regional NEPAD Activities ¹⁸	101230-005	2002 – 2004	\$22,543
MIMAP – Senegal – Phase II	102280	2004	\$50,000
ICT Resource Centre – Phase II: Creating R&D Capacity	102542	2005 – 2007	\$274,300
Seminar/Workshop on the Politics of the Campaign against Tobacco in Senegal	102889	2005 – 2006	\$14,450
SCAULWA 2005: Library Consortiums	103502-002	2005 – 2006	\$8,730
Science, Media and Society: Methodological Workshop	103582	2005 – 2006	\$15,000
Integration of ICTs in Local Government in Senegal	103111	2006 – 2008*	\$331,300
ECOHEALTH Training and Dissemination Workshops for West Africa, North Africa and the Middle East (WAF/MENA)	100586	2000 – 2001	\$365,606
Digitizing the Documentary Resources of IFAN Cheikh Anta Diop	100754	2001	\$134,680

¹⁸ The project entitled “Regional NEPAD Activities” was left out of this study due to lack of data and difficulties meeting with those involved.

Local Management of Water using Geographic Information Systems in French Speaking West Africa ¹⁹	103589	2006-2008*	\$45,000
Institutionalizing Gender and Women's Rights and Citizenship at CADU ²⁰	104029	2007-2008*	\$331,100

¹⁹ This project was added to the sample following IDRC recommendations.

²⁰ This project was added to the sample following IDRC recommendations.

Appendix V Documents Consulted

Articles/Documents

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- Ogiogio, Gene. “Measuring Performance of Interventions in Capacity Building: Some Fundamentals”, The African Capacity Building Foundation, ACBF Working Paper No. 2, October 2004
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- Laura Eggerton, IDRC-IDRC, SISERA: “Building Organizational Capacity in Sub-Saharan Africa”, May 2007
- Cheikh Anta Diop University, Rectorat, CENTRE DE MESURE.
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- INTERFACE, Bimonthly journal of Cheikh Anta Diop University, November-December 2005-ISSN 0852-0445 No. 02
- INTERFACE, Bimonthly journal of Cheikh Anta Diop University, September-October 2006
- Evaluation Highlight, Working Together to Strengthen Skill, IDRC’S Strategic Evaluation of Capacity Development, Phase 3:

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- JAD, Journal of African Development, Spring 2007/Volume 1 # 1. “An Analytical Framework for the New Partnership for Africa’s Development (NEPAD)”, Diery Seck, Ph.D.
- AFRICAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING (IDEP), “A Global Model of Very LongTerm Economic Development”, Diery Seck, Ph.D., September 2007
- Transaction Publishers New Brunswick (U.S.A.) and London (U.K.), “Think Tanks & Civil Societies: Catalysts for Ideas and Action”, James G. McGann & R. Kent Weaver, Editors
- “Évaluation organisationnelle, Cadre pour l’amélioration de la performance”, Charles Lusthaus, Marie-Hélène Adrien, Gary Anderson, Fred Carden, George Plinio Montalvan, Les Presses de l’Université Laval, International Development Research Centre
- Université Cheikh Anta Diop de Dakar, “*Notre Vision de l’UCAD*”, Professor Abdou Salam SALL, President, Rectorat, October 2003
- Africa’s Science & Technology Consolidated Plan of Action
- African Higher Education, An International Reference Handbook, Damtew Teferra and Philip G. Altbach, Editors
- NEPAD, CONFERENCE MINISTERIELLE DU NEPAD SUR LA SCIENCE ET LA TECHNOLOGIE, PROJET D’ESQUISSE D’UN PLAN D’ACTION, Johannesburg, Republic of South Africa, November 6-7, 2003
- Articles: PLAN OF LAGOS – 1980
- UNESCO INSTITUTE FOR STATISTICS, “A Decade of Investment in Research and Development (R&D): 1990-2000”, UIS Bulletin on Science and Technology Statistics, Issue No. 1, April 2004
- Senegal Science and Technology: A Brief Profile, www.research-africa.net/media/PDF/senegal.st.pdf
- IDRC: CADU Expenses 1990—2006
- Analytical review of the symposium on research and higher education: “*L’université, en tant que centre de recherche et de création du savoir est-elle une espèce menacée?*” UNESCO, Paris November 29-December 1, 2006
- “The Policy Paradox in Africa” – Under the direction of Elias Ayuk and Mohamed Ali Marouani, Sage Press, New Delhi, 2008
- Mintzberg, H., Quinn, J.B. “The Strategy Process: Concepts, Contexts, Cases”, Prentice Hall, 1991

Web Sites

- CADU web site

- Web site of the Association for the Development of Education in Africa
- Web site of the African Capacity Building Foundation
- Web site of the Association of African Universities

Appendix VI List of People Interviewed

Name, Given name	Organization	Title
AIDOO, Akwasi	TRUSTAFRICA	Executive Director
AW-NDIAYE, Eugénie R.	Cheikh Anta Diop University	Project Leader
AYUK, Elias T	IDRC	Senior Program Specialist for Globalization, Growth and Poverty (GGP)
CAMARA, Alioune B.	IDRC	Senior Program Specialist
COUTURE, Robert	IDRC	Regional Comptroller
DIAGNE, Dr Abdoulaye	Cheikh Anta Diop University	MIMAP Project Leader, CREA Director
DIALLO, Aminata Sall	Cheikh Anta Diop University	Professor of Medicine, Cooperation Branch
DIOP, Marietou	Cheikh Anta Diop University	Researcher
DRAME, Moussa	IDRC	Information Manager
ELDER, Laurent	IDRC	Team Leader, ACACIA
FAYE, Dr. Ndèye Arame Boye	Republic of Senegal, Ministry of Scientific Research	Director of Scientific Research
FORGET, Gilles	IDRC	Regional Director, West and Central Africa
GERARD, Jérôme	IDRC	Research and Information Officer
HIMA, Adiza M.	CONFEMEN	General Secretary
LEBEL, Jean	Cheikh Anta Diop University	Senior Program Officer
LISHOU, Claude	Cheikh Anta Diop University, <i>École supérieure polytechnique</i>	Full Professor
NDIAYE, Dr Samba	Cheikh Anta Diop University	Director, Computer Science
NIANG, Dr Abdoul Aziz	Cheikh Anta Diop University	Entomologist, Head of the Terrestrial Invertebrates Zoology Laboratory
NIANG, Dr Ibrahima	Cheikh Anta Diop University	Project Leader
SALL, Pr. Abdou Salam	Cheikh Anta Diop University	President
SALL, Nacuson	Cheikh Anta Diop University	Professor and Researcher

SECK, Diéry	NU, African Institute for Economic Planning and Development (IDEP)	Director
SENE, Henri (with Marietou DIOP)	Cheikh Anta Diop University	Researcher
SEYNABOU, Cissé Faye	Cheikh Anta Diop University	CADU Project Manager