

FORTUNES AND MISFORTUNES OF THE CENADI IN BÉNIN: HOW A NATIONAL DOCUMENTATION CENTER DISAPPEARED

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Why did an important, well-supported plan for a national economic development statistics center in Bénin fail, ask the authors, and what broader lessons can we learn from this? Such statistics are the foundation of information policies supporting sustainable economic development and social welfare. As part of a larger African initiative, in 1982 such a center was established in Bénin, but over time it failed completely. The authors identify multiple exogenous and endogenous causes, some of which may have been avoidable. The fundamental lesson is that the technology employed came to be more valued than the information it was intended to produce.

INTRODUCTION

Information and documentation services play an important role in economic and social development, and much has been written about this relationship. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has conceived and managed programs and projects at the global, continental, regional, or national levels; for example the United Nations International Scientific Information System (UNISIST), the General Information Programme (PGI), and the Information for All Programme (IFAP); and has published several studies and guidelines to demonstrate and emphasize the importance of information services. UNESCO has also set up standards regarding information collection, processing, storage, retrieval, and dissemination.¹ Furthermore, debates have taken place at UNESCO general conferences about information policy in order to make governments aware of its necessity for sustainable economic and social welfare.

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¹ See for example Victor Montviloff, *National Information Policy: A Handbook on the Formulation Approval, Implementation and Operation of a National Policy on Information* (Paris: UNESCO, 1990); Ines Wesley-Tanasković, *Guidelines on National Information Policy: Scope, Formulation and Implementation* (Paris: UNESCO, 1985); UNESCO, *UNISIST: Étude Sur la Réalisation d'un Système Mondial d'information Scientifique* (Paris: UNESCO, 1970), accessed Mar. 26, 2013, <http://unesdoc.unesco.org/images/0013/001355/135596fo.pdf>; UNESCO, *Politique Nationale de l'information: Portée, Élaboration et Mise en Oeuvre: Projet de Principes Directeurs Diffusé Dans le Cadre du Programme Général d'information de l'UNESCO* (Paris: UNESCO, 1982); Harald Schütz, ed., *Function and Organization of a National Documentation Centre in a Developing Country* (Paris: UNESCO, 1975).

An information policy is a set of rules and regulations conceived to provide guidance for the design of a strategy and programs for the development and use of information resources, services, and systems. “Information policy provides an umbrella term for all laws, regulations and doctrinal positions that deal with information, communication, and culture.”² An information policy may be defined at the local, national, or international level;³ and aims to ensure timely access to information for any person who is in need.⁴

In 1982 the Republic of Bénin created the “Centre National Automatisé de Documentation et d’information” (CENADI), translated as the National Automated Documentation and Information Centre, which established a national information network in order to sustain the country’s economic and social development. The CENADI underwent various changes that have influenced its missions, activities, and role in the Béninese national information system, and it eventually became simply the records and information office for the Ministry of Planning, Statistics, and Economic Analysis.⁵ Nevertheless, its original missions were never earmarked for any other administrative body. Therefore, the country has been without any national documentation center; in consequence, the numerous documents that administrative bodies produce daily are neither registered nor analyzed at any central point from which searches could be performed to make those documents more accessible. Public information is rarely accessible without intermediaries and negotiations, and the process is prone to corruption. Meanwhile, it is not currently possible to assess the country’s government-held documents from any national database; lack of access to scientific output is a previously researched example of this problem.⁶ Why and how did this happen? What lessons may be learned from this unfortunate situation? The objective of this article is to answer these questions.

The article is structured as follows: the second section gives some basic information on the Republic of Bénin; the third section deals with the Pan African Documentation and Information System (PADIS), implemented in Bénin via the CENADI, and the project’s missions, means, and achievements. The following section provides an overview of the changes made to the CENADI project during its existence, followed by an explanation of the reasons for its ultimate disappearance.

THE REPUBLIC OF BÉNIN

Bénin is a West African country with an area of 114,000 square kilometers and a population of about nine million in 2010. The inhabitants are 52% female, and 50% are under the age of 15; 42.5% of the people live in rural areas and 41.7% of adults are literate. There are two public universities and

² Sandra Braman, “Defining Information Policy,” *Journal of Information Policy* 1 (2011): 2.

³ Montviloff, 7.

⁴ Eustache Mègnigbèto, “Information Policy: Content and Challenges for an Effective Knowledge Society,” *The International Information & Library Review* 42, no. 3 (2010): 143-148; Eustache Mègnigbèto, “Une Politique de l’information Pour Quoi Faire?” *Revue Perspectives et Sociétés* 2, no. 1 (2011): 223-238.

⁵ Hereinafter referred to as “Ministry of Planning.”

⁶ Eustache Mègnigbèto, “Scientific Publishing in Bénin as Seen from Scopus,” *Scientometrics* 94, no. 3 (2013): 911-928.

seven private universities.⁷ The Gross Domestic Product per capita was USD \$750 in 2010; the following year, the United Nations Development Programme ranked Bénin 165th out of 187 as measured by the Human Development Index (HDI). Bénin's HDI score was 0.427, resulting in classification as "low" in human development.⁸ Bénin is bordered to the north by Burkina Faso and Niger, to the West by Togo, to the East by Nigeria, and to the south by the Atlantic Ocean. A former colony of France, Bénin became independent on August 1, 1960 under the name Republic of Dahomey. Porto-Novo is the capital, although Cotonou is the most well-known city abroad because for decades it has hosted major economic and administrative infrastructures (the President's office, nearly all Ministry offices, the seaport, and the airport). Cotonou is by far Bénin's largest city by population.

Political unrest resulted in the adoption of socialist ideology in 1972. The country was renamed the People's Republic of Bénin, and in 1975 a single-party authoritarian regime was established with central control and a state monopoly in all sectors of the economy. All the major private enterprises were nationalized. The public administration was the lone employer, ensuring a job for any person holding a diploma. An economic crisis began in 1982 and became severe in 1986. The government became unable to balance the national budget; recruitments of civil servants were suspended and difficulties in paying salaries were evident. Banks (all public) ran out of cash and were unable to respond to their customers' requests. In 1988 the country went bankrupt, the public administration ceased to exist, and a general strike was called as the economic crisis started to have social and political effects. Donors suspended their financial assistance and the government was forced to negotiate a structural adjustment program with the World Bank and the International Monetary Fund. To tackle the political ramifications of the crisis, the Conférence Nationale des Forces Vives de la Nation was convened in February 1990.⁹ This conference established a democratic regime with a liberalized political and economic system and with a presidential structure of government. These developments are known as the era of "democratic renewal" in the country, which reverted to its former name Republic of Bénin. The transitional government (1990-1991) and the newly elected president's government (1991-1996) focused on getting the public administration back to work and getting the economic system functioning again, thus strengthening the basis of the democratic system and introducing administrative, economic, and social reforms.¹⁰

⁷ Republic of Bénin, Ministère de l'enseignement Supérieur et de la Recherche Scientifique and François Adébayo Abiola, *Annuaire Statistique: Année Académique 2008-2010* (Cotonou, Bénin: Ministère de l'enseignement Supérieur et de la Recherche Scientifique, 2010).

⁸ United Nations Development Programme, *Human Development Report 2011: Sustainability and Equity: A Better Future for All* (New York: UNDP, 2011), accessed Mar. 26, 2013, http://hdr.undp.org/en/media/HDR_2011_EN_Complete.pdf.

⁹ Robert Dossou, "L'expérience Béninoise de la Conférence Nationale," white paper, presented at the Conférence Sur le Bilan des Conférences Nationales et Autres Processus de Transition Démocratique en Afrique, Cotonou, Bénin, 2000, accessed Mar. 26, 2013, <http://democratie.francophonie.org/IMG/pdf/1592.pdf>, 205-229; Robert Dossou, "Le Bénin: Du Monolithisme à la Démocratie Pluraliste, un Témoignage," in *L'Afrique en Transition Vers le Pluralisme Politique*, ed. Gérard Conac (Paris: Economica, 1992), 179.

¹⁰ Afize Adamon, *Le Renouveau Démocratique au Bénin: La Conférence Nationale des Forces Vives et la Période Transitoire* (Paris: L'Harmattan, 1995); Thomas Bierschenk, "Democratization Without Development: Bénin 1989-2009," *International Journal of Politics, Culture, and Society* 22 (2009): 337-357.

The Béninese public administration is recognized as ineffective; as in many African countries, the performance of the administration exemplifies a “ghost state” or “failed state”¹¹ characterized by a low level of material resources, inflexible bureaucratic norms, a sub-optimal distribution of personnel, and weak intra-administrative control.¹² The country faces pressing issues that have not been resolved since its independence, and it is heavily dependent on its neighbors Cote d’Ivoire, Ghana, and Nigeria. Of interest for this article is that connections to the Internet have been in effect since December 1995, though not for much of the population.¹³

THE PADIS-BÉNIN AND THE CENADI

Creation and Attributes

The Pan African Documentation and Information System (PADIS)¹⁴ is a program established in 1980 by the United Nations Economic Commission for Africa (UNECA). The program was a realization of the desire expressed in Resolution 366 (XV), passed in the same year by the Conference of African Ministers. This group was responsible for economic planning and development, and was aware of the importance of information in economic and social development. PADIS aims to equip beneficiary countries with a pyramidal information system structured at the national, regional, and continental levels for the collection, processing, storage, and dissemination of information to researchers and decision-makers. For this purpose, in each participating country the PADIS vision was to create a national center that serves as that country’s focal point for the continental program. These focal points are required to supply a central database housed in Addis Ababa, Ethiopia with information they had collected within the country of origin. It is in this context that the Bénin government and the UNECA signed an agreement to implement the PADIS project in Bénin, with the focal point being christened the “Centre National Automatisé de l’information et de la Documentation” (CENADI). According to a government decree, the CENADI is a public administrative body in charge of the management of information for development.¹⁵ It aims to identify, locate, gather, and process scientific information relative to the economic and social development of the country, and to make it available in a timely fashion to decision-makers, planners, financial leaders, researchers, and everyone interested in the social and economic development of Bénin. The CENADI was conceived to serve as the coordinating organization for the Béninese national information system.

¹¹ Dominique Darbon, “Réformer ou Reformer les Administrations Projetées des Afriques? Entre Routine Anti-politique et Ingénierie Politique Contextuelle,” *Revue Française d’administration Publique* 1, no. 105-106 (2003): 135-152.

¹² Bierschenk.

¹³ Ken Lohento, “Radioscopie de la Connexion du Bénin à l’internet,” white paper, Université Nationale du Bénin, 1996, accessed Mar. 26, 2013, <http://www.iafric.net/Bénin/memo/index.html>.

¹⁴ The name “Pan African Documentation and Information System” was formally adopted in 1989. See University of Pennsylvania African Studies Center, The Pan African Development Information System, accessed Mar. 26, 2013, http://www.africa.upenn.edu/Acad_Research/padis_ams.html.

¹⁵ Republic of Bénin, Décret N° 82-22 Portant Approbation Des Statuts Du Centre National Automatisé De Documentation Et D’information (CENADI), Jan. 18, 1982.

Overall, the vision, missions, and functions of the CENADI were beneficial for Bénin, as it endowed the country with the basic information system infrastructure and network it needed to master the flow of information produced within and about the country, and to make that information available in a timely fashion.

Structural Organization

The CENADI was housed in the Béninese Ministry of Planning, Statistics, and Economic Analysis. It was endowed with a board and an executive directorate. The board was composed of nine members among whom six were representatives of the government; this is an illustration of the importance given to the project by the government and also to its expected outcomes. The executive directorate was headed by a director, and grouped together a secretary and six departments: 1) the Department of Administration and Finances, 2) the Department of Planning and Development of the National Information System, 3) the Department of Information Processing and Dissemination, 4) the Department of Computer Science, 5) the Department of Training, Research, and Information, and 6) the Department of Reproduction.

Personnel and Finances

At its beginning, the CENADI's personnel included only five civil servants (three computer science specialists and two library and documentation specialists). But later on, additional recruitments had been made and through years, the number of civil servants had varied; for example, in 2000 there were 13 employees.¹⁶ College students in Library and Information Science were required to work at the CENADI for three-month periods in return for training in computer literacy, library management, and library automation.¹⁷ Some cooperation agencies like the Cooperation française and the International Development Research Centre (IDRC) would also send workers from France or Canada to the CENADI to provide technical assistance for one or two years.

The project was conceived for a period of ten years (1980-1989)¹⁸ with an estimated total cost of USD \$8 million.¹⁹ Over the first three years, its required budget was USD \$1.9 million of which

¹⁶ Republic of Bénin, Centre National de Documentation et d'informatique, *Etude De Cas: Repositionnement Du Centre De Documentation et d'informatique (CDI) Du Ministère d'état Chargé de la Coordination de l'action Gouvernementale Du Plan, Du Développement et de la Promotion de l'emploi* (Cotonou, Bénin: Centre de Documentation et d'informatique, 2000).

¹⁷ Eustache Mègnigbèto, "A Quarter of a Century of Training in Information Science in Bénin: Opinion and Wishes from Beneficiaries," in *Educational Curricula: Development and Evaluation*, ed. Jennifer N. Casey and Rachel E. Upton (New York: Nova Science Publishers, 2008), 201-217; Eustache Mègnigbèto, "La Formation en Science de l'information au Bénin: Jugement et Souhaits des Bénéficiaires," in *Francophonies et Bibliothèques: Innovations, Changements et Réseautage*, ed. Dominique Gazo and Réjean Savard (presented at the Premier Congrès de l'Association Internationale Francophone des Bibliothécaires et Documentalistes et satellite IFLA, Université de Montréal, 2008), 63-73; Madeleine Igué and Azaria Fakorédé, "Rapport de Passation de Service," report for Republic of Bénin, Centre de Documentation Technique, Nov. 22, 1994, 4.

¹⁸ Republic of Bénin, Institut National de la Statistique et de l'analyse Économique, *Historique du Projet 'CENADI': Centre National Automatisé de Documentation et D'information* (Cotonou, Bénin: Institut National de la Statistique et de l'analyse Économique, 1982), 2.

¹⁹ Republic of Bénin, Ministère en Charge du Plan et de la Statistique, *Discours du Camarade Ministre Délégué Auprès du Président de la République, Chargé du Plan et de la Statistique à l'occasion de l'inauguration du Centre National de Documentation et D'informatique* (Cotonou, Bénin: Republic of Bénin, 1986).

84.21% should have been supported by international cooperation and the remainder by the national budget.²⁰ The 1985 national budget of Bénin, for example, planned to fund the project in the amount of USD \$120,000.²¹ According to the project document,²² the central coordinators of PADIS in Addis Ababa should have helped Bénin seek funding from donors.²³ The potential bilateral and multilateral donors that had expressed an interest in funding the project were the United Nations Development Programme, the International Research Development Centre, the African Development Bank, the European Economic Community (now European Union), the World Bank, the Arab Fund for Development, the United States Agency for International Development, and the countries of France, Italy, Canada, and Germany.²⁴ After 1990, the project's budget would have been funded entirely by the national treasury.²⁵

Information resources

At the birth of the CENADI, the Ministry of Planning had a documentation and information center known as the Bureau Central des Projets in one of its directorates. This center was the best-organized within the ministry and one of the best-organized in the country at that time.²⁶ It grouped together documents produced throughout the management cycles of government projects. The center's specialization in first-hand information related to the social and economic development of Bénin drew the attention of the United Nations Industrial Development Organization, which had sent an expert to organize and prepare it for automation.²⁷ The information resources of this center served as the embryo of the CENADI, with about 2,000 documents. Later, a government decree on July 23, 1985²⁸ established a copyright registration for all documents any public administrative body produced, for the benefit of the CENADI. The decree has four articles, with the first two of interest here:

Article 1: In the framework of the automation of public materials in order to make available reliable data to authorities, technicians and planners of the People's Republic of Bénin, each ministry, each public administrative body and each national institution is obliged to deposit two copies of publications that result from its

²⁰ Republic of Bénin, Institut National de la Statistique et de l'analyse Économique, *Historique Du Projet 'CENADI': Centre National Automatisé De Documentation Et D'information*, 2.

²¹ Jean-Luc Sènou, *Passation de Service: Dossier du CENADI* (Cotonou, Bénin: CENADI, 1984).

²² Republic of Bénin, Décret N° 82-22.

²³ People's Republic of Bénin, *CENADI: Centre National Automatisé d'information et de Documentation (Document de Projet)* (Cotonou, Bénin: People's Republic of Bénin, unknown date).

²⁴ Republic of Bénin, Institut National de la Statistique et de l'analyse Économique, *Aide-mémoire Sur le Projet CENADI: Centre National Automatisé de Documentation et d'information* (Cotonou, Bénin: Institut national de la statistique et de l'analyse économique, ca. 1981), 2.

²⁵ Ibid.

²⁶ Jacques-André Humair, *Organisation du Centre de Documentation du Bureau Central des Projets: Rapport Final de Mission* (Cotonou, Bénin: Organisation des Nations Unies Pour le Développement Industriel, 1982).

²⁷ Ibid.

²⁸ Republic of Bénin, Décret N° 85-286 Portant Obligation de Dépôt Par Tous les Ministères, Toutes les Unités de Production ou Institutions Nationales, des Documents Produits, au Centre National Automatisé de Documentation et D'information, du Ministère du Plan et de la Statistique, July 23, 1985.

activities, at the national automated documentation and information center (CENADI).

Article 2: The publications referred to in Article 1 above are: books, papers delivered at the end of studies or seminars, mission reports and every document relevant to political, economic or social and cultural fields.

Therefore, any document produced by any administrative body should have been automatically available at the CENADI. The CENADI's holdings were composed of research reports, project evaluation reports, survey reports, governmental publications, taxation studies, minutes of meetings, political authorities' announcements on political or economic orientations, grey literature, books, periodicals, legislation, etc. The periodicals collected were primarily French newspapers like *Le Monde*, *Le Monde Diplomatique*, *Jeune Afrique*, *Marché Tropicaux* and some specialized magazines in the fields of agriculture or health. Overall, the CENADI had subscribed to about 30 titles. The size of the holdings was estimated to be 5,000 documents in 2000.²⁹ The costs for subscriptions were supported by donors like the United Nations Development Programme (UNDP), the International Development Research Centre (IDRC), the World Bank, the Cooperation Française, the Organisation Internationale de la Francophonie (through its specialized agencies), and others.

Equipment

The following discussion is focused on technical equipment that was used for the management of information and documents, because the use of this equipment illustrates the effectiveness of the CENADI. In 1986, the CENADI was equipped with a minicomputer HP 3000 series 48 offered by the UNDP.³⁰ The minicomputer was able to serve up to 152 terminals, but only ten had actually been connected. The minicomputer was also equipped with devices to enable periodic data backup on a magnetic tape. Some software applications were installed: office management (HPWord, HPSlate, IDS, HPDraw, HPMail); database management (Image, Query, Ksam, HP Dictionary); and programming languages (COBOL, PRG, Pascal, Basic, SPL and FORTRAN). Specific software packages for statistical and economic analysis were also installed.³¹ With such equipment, the CENADI became the primary demonstration site for computer science in Bénin, and gained the interest of administrative bodies and citizens interested in surveys or working with computers. The Institut National de la Statistique et de l'analyse Économique (INSAE, National Institute for Statistic

²⁹ Republic of Bénin, Centre National de Documentation et d'informatique. *Etude de Cas: Repositionnement du Centre de Documentation et d'informatique (CDI) du Ministère d'état Chargé de la Coordination de l'action Gouvernementale du Plan, du Développement et de la Promotion de l'emploi.*

³⁰ William E. Gaymon, *Discours d'inauguration du Centre de Calcul du Centre National de Documentation et d'informatique (CENADI)*, white paper, Republic of Bénin, 1986; Republic of Bénin, Ministère en Charge du Plan et de la Statistique, *Discours du Camarade Ministre Délégué Auprès du Président de la République, Chargé du Plan et de la Statistique à l'occasion de l'inauguration du Centre National de Documentation et d'informatique.* The online HP Computer Museum provides an image of the computer at <http://www.hpmuseum.net/images/3000Sys48-60.jpg>.

³¹ Gaymon.

and Economic Analysis), one of the first administrative bodies equipped with a computer in Bénin,³² had even contracted with the CENADI to process some of its survey results.³³

However, the frequent failure of the computer system and the associated repair costs led to its abandonment in 1990, less than four years after it had been put into service. In fact, the minicomputer had been purchased and received effectively in 1984 but the CENADI did not have an appropriate facility in which to store it.³⁴ Therefore, the machine had been stored at the INSAE premises.³⁵ This means that for about two years, the minicomputer hadn't functioned due to the lack of adequate premises. Besides, the maintenance of the minicomputer consumed a significant part of the project budget. Indeed, whenever the equipment failed, the CENADI had to turn to financial donors, hire a technician from Abidjan, Cote d'Ivoire, and pay his fees and cover his travel costs (including airline ticket and hotel). If the technician detected a faulty component, the CENADI had to ask again for financial support and purchase the component in Europe. Meanwhile, the technician would return to Abidjan, so once the component was delivered, the technician had to travel again to Cotonou to fix the machine. All in all, the maintenance of the minicomputer became too costly. Microcomputers were purchased when the minicomputer was abandoned.

Bibliographic Processing Tools

Besides the minicomputer and the terminals, the CENADI was endowed with some tools for the management of its documentation and information resources. MinISIS is a generalized database application that can be configured for the end user's needs and is capable of quickly storing, organizing, retrieving, reporting, and importing or exporting any kind of textual data. Its features include a wide range of language choices, flexible database management systems, tools to facilitate data entry and modification, and powerful retrieval capabilities. The software was installed with the financial support of the IDRC; the PADIS provided the configuration within MinISIS of a MARC-like bibliographic database and a cataloguing manual tailored upon the database fields.³⁶ The Organisation for Economic Co-operation and Development's (OECD) Macrothesaurus program was adopted for both document indexing and classification.³⁷ A printed form conceived by the PADIS was used in the first step of bibliographic description: once a form was filled in, it was checked and validated before bibliographic information was introduced into the database.

³² Humair.

³³ Sènou.

³⁴ Ibid.

³⁵ Ibid.

³⁶ United Nations Economic Commission for Africa, *PADIS Manual for Document Analysis* (Addis Ababa, Ethiopia: United Nations Economic Commission for Africa, 1981); United Nations Economic Commission for Africa, *PADIS Manual for Document Analysis CDS/ISIS Version* (Addis Ababa, Ethiopia: United Nations Economic Commission for Africa, 1996), accessed Mar. 27, 2013, <http://repository.uneca.org/bitstream/handle/10855/1600/Bib-13186.pdf?sequence=1>.

³⁷ Jean Viet, *Macrothesaurus Pour le Traitement de l'information Relative au Développement Économique et Social*, 3rd ed. (Paris: OECD, 1985).

Achievements

According to the project document, the CENADI was to produce and maintain bibliographic and statistical databases related to Bénin's economic and social development.³⁸ It was also envisioned to offer remote end-user access to its information resources and to produce printed indexes, bibliographies, directories, and on-demand reports to end users. It was also to produce the *Devindex Bénin*, a periodic publication collecting bibliographic descriptions of documents the center had acquired. The contents of the *DEVINDEX Bénin* would contribute to the *DEVINDEX Africa* produced by the PADIS at its headquarters in Addis Ababa. But due to financial and political issues,³⁹ the CENADI produced only one volume of this publication, in 1988.⁴⁰ The center also produced some databases: a bibliographic database on the documents available at the CENADI (3,500 references in 1997); a bibliographic database on publications relative to the social and economic development of Bénin (BENDEV, 900 references in 2000); a database on information and documentation centers in Bénin (1998); a database on decrees and laws; a directory of information sources related to the social and economic development of Bénin (two editions: 1988 and 1994); a directory of studies, surveys and seminars held on the social and economic development of Bénin over the period 1988-1993; and an annotated bibliography on Bénin. In partnership with other national administrative bodies, the CENADI contributed to the publication of a directory of Béninese scientists (1994), a catalog of doctoral dissertations available at the libraries of the Université Nationale du Bénin (1994), and the national union catalogue of periodicals available in the country (1994).⁴¹

International Cooperation

The center was made possible by cooperation between the Béninese government, the UNECA, and donors. It had benefited from international cooperation that resulted in equipment, financial support, technical assistance, and training for local personnel (which took place at the PADIS headquarters in Addis Ababa, elsewhere in Africa, or in Europe). A feasibility study for the entire PADIS program was led by UNESCO. The implementation of the CENADI was supported both technically and financially by the UNDP, the UNECA, the IDRC, and UNESCO. Later on, the World Bank, the European Union, the Cooperation Française, and the Organisation Internationale de la Francophonie and its specialized agencies joined the effort.⁴² The involvement of UNESCO may explain the adoption of MinISIS. In fact, CDS/ISIS, a textual management software

³⁸ People's Republic of Bénin, *CENADI: Centre National Automatisé d'information et de Documentation (Document de Projet)*.

³⁹ Republic of Bénin, Centre National de Documentation et d'informatique, *Etude de Cas: Repositionnement du Centre de Documentation et d'informatique (CDI) du Ministère d'état Chargé de la Coordination de l'action Gouvernementale du Plan, du Développement et de la Promotion de l'emploi*.

⁴⁰ Republic of Bénin, Centre National de Documentation et d'informatique, *DEVINDEX Bénin: 1988. Volume 1: Index de la Littérature Sur le Développement Socio-économique de la République du Bénin* (Centre National de Documentation et d'informatique, 1988).

⁴¹ Republic of Bénin. Centre National de Documentation et d'informatique, *Etude de Cas: Repositionnement du Centre de Documentation et d'informatique (CDI) du Ministère d'état Chargé de la Coordination de l'action Gouvernementale du Plan, du Développement et de la Promotion de l'emploi*; Igué and Fakoredé.

⁴² The specialized institutions included the former Agence de Coopération Culturelle et Technique (ACCT) and the Banque Internationale d'Information des Etats Francophones (BIEF).

application, was developed by UNESCO in 1970 for the management of its own documentation.⁴³ IDRC had developed MinISIS as a special version of the former application for minicomputers.

To reduce costs, documentation centers require automation which in turn creates dependence on developers or commercial companies. As an alternative to the adoption of commercial software, UNESCO and IDRC provided developing countries with free CDS/ISIS software. Later, upon the advent of microcomputers and the Microsoft Disk Operating System (MS-DOS), a new version was released called Micro-CDS/ISIS.⁴⁴ This version, distributed free of charge by UNESCO, was adopted widely in developing countries and has enabled the automation of thousands of libraries and information services. A tangible result of the PADIS program is the use of CDS/ISIS, until recently, by almost all automated documentation centers to manage their collections. The CENADI was the official distributor of CDS/ISIS in Bénin;⁴⁵ in cooperation with UNESCO, the Banque Internationale d'Information des Etats Francophones (BIEF), and the Organisation Internationale de la Francophonie (OIF), it organized several national or international training sessions.

Services to the Public

The public had free access to the holdings of the CENADI and its databases. Users could obtain copies of materials from printed research databases at fixed prices. The center also offered training to the public in the areas of computer literary and office management software, though this did not fall under its official mission.⁴⁶ Many Béninese people paid for this service; after six months of training they were issued a certificate.

CHANGES OF NAME AND MISSION

The CENADI underwent several changes to its name and mission. First, there was an ambiguity in the development of the acronym "CENADI." Indeed, in the original project document the title was clearly written as "Centre National Automatisé de Documentation et d'information"⁴⁷ (National Automated Information and Documentation Centre). All the documents related to the preparation of the project,⁴⁸ plus the decrees creating the center⁴⁹ and establishing a copyright registration⁵⁰ also used that name. However, in an announcement on June 18, 1986, on the occasion of the

⁴³ UNESCO, *Mini-micro CDS/ISIS: Manuel De Référence: Version 2.3* (Paris: UNESCO, 1989).

⁴⁴ Ibid.

⁴⁵ Igué and Fakorédé, 2.

⁴⁶ Ibid., 12.

⁴⁷ People's Republic of Bénin, *CENADI: Centre National Automatisé d'information et de Documentation (Document de Projet)*.

⁴⁸ Republic of Bénin, Institut National de la Statistique et de l'analyse Économique, *Aide-mémoire Sur le Projet CENADI: Centre National Automatisé de Documentation et d'information*; Republic of Bénin, Institut National de la Statistique et de l'analyse Économique, *Procès Verbal de Réunion* (Cotonou, Bénin: Institut National de la Statistique et de l'analyse Économique, 1982).

⁴⁹ Republic of Bénin, Décret N° 82-22.

⁵⁰ Republic of Bénin, Décret N° 82-22; Décret N° 85-286 Portant Obligation de Dépôt Par Tous les Ministères, Toutes les Unités de Production ou Institutions Nationales, des Documents Produits, au Centre National Automatisé de Documentation et d'information, du Ministère du Plan et de la Statistique, July 23, 1985.

minicomputer being put into official use, the Minister of Planning used the name “Centre National de Documentation et d’informatique”⁵¹ (National Documentation and Computer Science Centre), a name that was repeated in an October 1987 report.⁵² One may notice that the adjective *automatisé* (automated) was dropped and replaced by *informatique* (computer science). However, the acronym remained unchanged. As paradoxical as this may be, no official text was written to support these changes, though the government’s decree to launch the project was still valid.

A government decree of March 1992 renamed the CENADI as “Centre de Documentation Technique”⁵³ (Technical Documentation Centre, CDT). In opposition to the original decree that created the CENADI, this new decree related to the attributions, missions, and structure of the Ministry of Planning under the first newly elected President of the Republic (following the change of government in 1991). Reports indicated that the director of the center at that time had led a mission to Lomé (capital of the neighboring Republic of Togo) and discovered that the Togolese Ministry of Planning had a documentation center called the “Centre de Documentation Technique.” Once back in Cotonou, she initiated a name change for the CENADI.

The resulting decree restricted the collection of documents to those produced by the directorates of the Ministry of Planning. This means that the CENADI’s areas of expertise were legally suppressed; hence, it became the documentation center for the Ministry of Planning only. This situation might have been the result of government awareness of the national treasury’s inability to continue funding the national information system as conceived by the PADIS. Recall that the economic and social situation at that time had caused Bénin to lose the confidence of international donors, so the government focused its actions on gaining the trust of the international community. The government succeeded however in getting financial support from the Coopération Française to fund some activities of the CDT from 1991 to 1995, within the framework of a project called “Réseaux Documentaires Pour le Développement du Bénin.”⁵⁴ However, the nation’s democratic transformation during that period did not lead to the CENADI’s renewal.

In 1996, a new president was elected and a new government appointed. The new Minister of Planning installed an official government Internet server and launched the government website. In May 1997, the CDT became “Centre de Documentation et d’informatique” (Documentation and Computer Science Center, CDI).⁵⁵ The word *informatique* came back again. Information dissemination through the Internet was added to the center’s responsibilities.

⁵¹ Republic of Bénin, Ministère en Charge du Plan et de la Statistique, *Discours du Camarade Ministre Délégué Auprès du Président de la République, Chargé du Plan et de la Statistique à l’occasion de l’inauguration du Centre National de Documentation et d’informatique*.

⁵² Jean-Luc Sènou and François Amètonou, “Procès-verbal de Passation de Service,” report for Republic of Bénin, Centre National de Documentation et d’informatique, Oct. 28, 1987.

⁵³ Republic of Bénin, Décret N° 92-63 Portant Attributions, Organisation et Fonctionnement du Ministère du Plan et de la Restructuration Économique, March 10, 1992, article 10.

⁵⁴ Igué and Fakorédé, 4-5.

⁵⁵ Republic of Bénin, Lette circulaire n° 2022/MPREPE/DC/SG/CDI, Sept. 11, 1999. Compare with Republic of Bénin, Ministère du Plan and Agence Intergouvernementale de la Francophonie, *Information Sur les Pays Francophones: Bénin* (Paris: Ibiscus, 1994), 20.

Though the national competence in collecting governmental and administrative documents was reaffirmed, the competence of the CENADI was lost for many years and it was operated as a simple information and documentation center for the Ministry of Planning. Even the directorates within this ministry failed to send their publications to the documentation center, so in 1998 the copyright registration decree was recalled for all the Ministry of Planning directorates.⁵⁶ In 2000, the new name of the CENADI was “Direction de la Documentation et de l’administration du réseau internet du Gouvernement” (Directorate of Documentation and Administration of the Government Internet Network). The updating of the government website and the development of Internet services within Bénin’s public administration fell under its responsibilities for about three years. Another new name was adopted in 2002, “Direction de la Documentation et de l’informatique” (Directorate of Information and Computer Science). Since 2007, the name has been “Service de Pré-archivage et de la Documentation” (Records and Information Office). It is now clear that the CENADI is an office in charge of the management of records from the Ministry of Planning only. It is obvious that the changes to the name have affected the project’s missions and internal structure, away from those stated in the project’s original planning documents.⁵⁷ In 2013, the record management office has just one civil servant, and the flow of documents has been reduced to those produced or received by the Ministry of Planning.

REASONS WHY THE CENADI PROJECT FAILED

Many studies have been conducted on why and how development projects fail in the developing world in general; the failures are often related to problems of political, financial, and administrative governance. In Bénin particularly, most of the development projects of the past 40 years have been driven by international donors.⁵⁸ Thomas Bierschenk summarized the major reasons why projects have failed in Bénin. First, he pointed out the political immobility that causes foreign-funded major reform projects to stall, or advance very slowly only if donors exert pressure; second is the low effectiveness of the administration in general.⁵⁹ In the case of the CENADI, there have been many specific reasons for the project’s sad fate. The name “CENADI” has disappeared and its mission has not been transferred to any other administrative body.⁶⁰

The first reason for the CENADI’s fate is the weakness of the administrative supervision. The CENADI depended upon the Ministry of Planning, but other ministries and their administrative

⁵⁶ Republic of Bénin, Centre National de Documentation et d’informatique, *Etude de Cas: Repositionnement du Centre de Documentation et d’informatique (CDI) du Ministère d’état Chargé de la Coordination de l’action Gouvernementale du Plan, du Développement et de la Promotion de l’emploi*.

⁵⁷ Republic of Bénin, Ministère du Plan and Agence Intergouvernementale de la Francophonie, *Information Sur les Pays Francophones: Bénin*.

⁵⁸ Thomas Bierschenk, Elisabeth Thioléron, and Nassirou Bako-Arifari, “Bénin,” *Development Policy Review* 21, no. 2, *Special Issue: Are PRSPs Making a Difference? The African Experience* (2003): 161-178.

⁵⁹ Bierschenk.

⁶⁰ The current “Service de Préarchivage et de la Documentation” does not have the same mission, and it only inherited the CENADI’s holdings and part of its facilities.

bodies had to feed the CENADI's holdings with their own publications. This may have seemed like an advantage for the Ministry of Planning, but while other ministries in the Béninese government contributed to the CENADI's holdings they did not receive documents created by any other ministry (or even the Ministry of Planning) in return. Other ministries also had their own information and documentation centers to which they had to contribute, thus reducing the CENADI's effectiveness.

It would have been better to place the center under either the President's Cabinet or the government's General Secretary. If this had been the case, all administrative bodies would have seen the center as common to all ministries. Even so, the copyright registration decree might have undergone the same fate due to the "low effectiveness of the administration in implementing government decisions"⁶¹ and the "ghost state" characteristics of the administration's performance.⁶² Indeed, numerous administrative decisions or laws await implementation in Bénin, even by state institutions and decision-makers. This explains why the copyright registration was observed for about three years and then ignored. The recall of the copyright registration in 1998 didn't yield many appreciable results.⁶³

The second reason why the CENADI failed is the administrative instability at both the ministry level and the CENADI head's level. Over the five-year mandate, each President of the Republic would appoint three cabinets on average; often, newly appointed ministers in turn appointed the heads of all administrative bodies under their supervision. From its opening in 1984 to 2000, the center had been ruled by eight different directors; each head of the center served just two years on average. In these conditions, it is obvious that any follow-up of decisions or actions would be unlikely or impossible. The frequent changes of directors affected the CENADI's functioning. An undated and unsigned government document entitled "Questionnaire" collected the responses of two anonymous representatives of the CENADI's donors concerning the center's evolution and future orientations. The first respondent's institution didn't appear in his response; however, the second represented the International Development Research Centre (IDRC). Both respondents pointed out administrative instability as a reason for the CENADI's weaknesses and ineffectiveness.⁶⁴

Administrative instability led to a third reason for the failure of the project: the progressive weakness of the CENADI's leadership board. The board should have validated policies, budgets, annual plans of action, and annual activity reports; it also should have ensured its relative independence from the government while seeking funding. But the board was no longer effective after about three years due to the constant turnover of its members, because six board members out of nine were from the government. Indeed, newcomers to the board were decreasingly aware of the usefulness of the project; the IDRC representative in the aforementioned questionnaire had doubted whether high-

⁶¹ Bierschenk, 16-17.

⁶² Darbon.

⁶³ Republic of Bénin, Centre National de Documentation et d'informatique, *Etude de Cas: Repositionnement du Centre de Documentation et d'informatique (CDI) du Ministère d'état Chargé de la Coordination de l'action Gouvernementale du Plan, du Développement et de la Promotion de l'emploi* 4.

⁶⁴ Even though the document is undated and unsigned, its content suggests it was created by the CENADI soon after the February 1990 Conférence Nationale, perhaps in 1991 or 1992.

level officials appreciated the CENADI's importance. It appears that the Béninese authorities were excited by the idea that the country would be equipped with cutting-edge information technologies and equipment from which they could profit. An announcement by the Minister of Planning when the minicomputer was officially placed into service provides an illustration: instead of emphasizing the project's focus on information management he instead focused on the opening of a computing center at the CENADI, how Bénin was the first West African country with such equipment, how the computing center would be the core of the future national computer network, etc.⁶⁵

The successive changes to the center's name and the appearance of the term *informatique* produced instability and corruption of the center's mission. These changes established the preeminence of computer science-related activities over those of information and documentation. Computing, which should have been a tool serving the management of the national information system, instead became the focus of the project at the expense of documentation and information services. As an illustration of this effect, half of the Minister of Planning's speech when opening the "computing center" dealt with the advantages of computing and computer science. Meanwhile, the CENADI's directors have been appointed from the ranks of either statisticians or demographers. The center was best known not for information and documentation activities but for computer literacy training, even though this activity didn't fall under its official mission.⁶⁶ Documentation activities did not make money for the CENADI's budget, but computer training centers were rare in Bénin and the trainees at the one in the CENADI paid fees. The computer science activities had hidden the documentation and information activities, and according to Marie-Madeleine Igué and Azaria Fakorédé, the computer training started in the early 1990s to fight the idleness of the CENADI's computer specialists⁶⁷

The project was the victim of its modern technology and the administration's needs for equipment. Indeed, for any work that needed a computer, the government came to the CENADI. For example, even though the INSAE owned computers, some of its surveys were processed with the HP 3000 at the CENADI. It is possible that other administrative bodies were jealous of the CENADI. It is worth recalling that at that time, computers were rare in the Béninese administration. Only the Office Béninois d'informatique (OBI, Béninese Computer Science Corporation) and the INSAE were equipped with computers, and the OBI's server was facing serious repetitive failures just like the CENADI's servers would face a few years later.

There may also be other reasons for the sad fate of the CENADI. The project was too ambitious and needed tremendous financial support that the national budget could not provide. The center functioned like the documentation office of the Ministry of Planning rather than as the coordinating structure of the national documentation system. A shortage of personnel was another problem faced by the center; Schütz has stated that from experience, a national documentation center should have

⁶⁵ Republic of Bénin, Ministère en Charge du Plan et de la Statistique, *Discours du Camarade Ministre Délégué Au près du Président de la République, Chargé du Plan et de la Statistique à l'occasion de l'inauguration du Centre National de Documentation et d'informatique*, 1, 6, 8.

⁶⁶ Igué and Fakorédé, 12.

⁶⁷ Ibid.

at least 50 employees to ensure its effective functioning.⁶⁸ All of these problems significantly hindered the CENADI's operations and achievements. So, the project was a total failure.

CONCLUSION

The PADIS project was conceived to endow the African continent with an information system to favor the flow of documents that African countries needed for their development. In each participating country, the PADIS set up a national focal point that should have developed and coordinated a national information system. Each focal point would collect, process, store, and disseminate the information produced nationally; and also feed the central system hosted at PADIS headquarters in Addis Ababa. The PADIS focal point in Bénin, the Centre National Automatisé de Documentation et d'information (CENADI), should have begun operations in 1982 but did not until 1984. Indeed, after the agreement of early 1981, it took about one year for the government to approve the project plan. Meanwhile, there were no adequate facilities available that could serve as the CENADI office and house its equipment and personnel. Therefore, the government's first action after approving the project plan was to seek funds in order to find adequate facilities, while personnel had to receive training in library and computer science both locally and abroad.

From a legal point of view, the CENADI officially existed for ten years (1982-1992), but from a functional point of view it really only existed for four years (1984-1988). Like many other projects in Africa at that time, the CENADI was foreign-funded but its needs were not adequately expressed by the Béninese authorities; therefore the project stalled after donors suspended their financial assistance due the political, financial, and economic crisis of the late 1980s. The CENADI also failed to deliver its required outputs, thus hastening its disappearance. The exogenous causes for the CENADI's failure include the political immobility that characterizes Bénin, the low effectiveness of the administration in making and implementing decisions, the lack of strong political and administrative governance, and the managerial instability caused by the constant changes in the government and in the project's leadership. Weaknesses related to the project itself include the changes to its name that in turn induced changes to its mission, the preeminence of computing over documentation and information activities, the inability of the national budget to support the project's tremendous needs, and the low awareness from the higher authorities of the project's importance.

The fate of the CENADI project suggests that technologies of information and communication are only tools or means, and acquiring them is not sufficient to achieve a desired goal. Resources should not be diverted from the objectives for which they were acquired. Even though information does not yet generate revenues in developing countries, it is as important as natural resources; therefore, information policy is vital for the development of any state.

⁶⁸ Schütz.

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