EUROPEAN REPORT ON DEVELOPMENT

SOCIAL OPPORTUNITY VERSUS URBAN BIAS PRE-FINANCING COMMUNITY HEALTH-CARE IN RURAL CONGO

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Paper prepared in the framework of the European Report on Development 2010.

European University Institute
Robert Schuman Centre for Advanced Studies

MOBILISING EUROPEAN RESEARCH FOR DEVELOPMENT POLICIES

ABSTRACT

Purpose: this paper studies the feasibility of a participatory approach in providing health-care services. It focuses on a concrete case study in rural Congo - Brazzaville (the village Moubangou, district of Kimongo). It assesses the real possibilities for rural households to participate in this scheme by analysing what determines whether, and, if so, how, they become eligible for (pre-) financing health-care. The scheme can be figured as a triangle in which government, local populations and NGOs are involved in improving the local/national health conditions of the population.

Methodology: data are from the Recensement Général de la Population et de l'Habitat (2007), Enquête Congolaise auprès des Ménages (2005) and from other fonts to describe the health situation in the country. Original data are from a recent questionnaire in an empirical perspective. The questionnaire is completed and qualitatively supported by different focus groups. An experimental approach is applied in order to estimate formally the key determinants on the probability of acting collectively to solve questions related to health-care in the rural context.

Findings: By considering social opportunities as arrangements that society makes in terms of education, health-care, etc., which greatly affect an individual's ability to improve his or her condition (Sen: 2004), the variations (rural versus urban) in sub-Saharan Africa (SSA) emphasise the gap between social and economic achievements. In this way, the paper tries to capitalise on the recent findings concerning the debate in order to elaborate a conceptual framework. The latter is needed to set an appropriate strategy for improving the health-care system, in which externalities, such as external shocks, are particularly important. With colonialism, in particular after 1987, Health Management in Congo developed a system in which medical expenses are supported individually. This approach is not always favourable to vulnerable rural populations because it does not facilitate access to basic health. It does not allow the risks to be shared between ill and healthy people. The high costs for hospitalisation or for the treatment of a serious illness, the nature of diseases in correlation with their social and economic background, the instability of income in rural area and many other reasons suggest a collective coverage of health expenditures. The advantages of this approach are the followings: a risk-sharing approach and a preventive approach (by pre-financing). Both aspects imply an improvement in terms of equality in access to health-care, encouragement to the providers to improve the quality and efficiency of care services, the involvement of the local population in the strategic management of the structure without excluding the government in its principal directives. The result is similar to a triangle in which local populations, NGOs and government play together for the same purpose.

Social implications: findings bear implications on how rural communities should convey their energies in order to face the crucial question of health. They also imply, for international donors, the question of how to assist both local and disadvantaged communities best.

Originality: papers concerning the determinants of health in rural areas generally consider the actual role, but not the potential building capacities of the farmers. The original view in this paper is the personal author experience.

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Table of Abbreviations and Acronyms

AfDB	African Development Bank
AIDS	Acquired Immuno Deficiency Syndrome
CB	Capital Budget
CFCO	Chemin de Fer Congo Océan
CHU	Centre Hospitalier Universitaire
CMDT	Cadre de Dépenses à Moyen Terme
CNSEE	Centre National de la Statistique et des Etudes Economiques
CP	Community Participation
CSI	Centre de Santé Intégré
CSI PMAE	Centre de Sante Intégré à Paquet Minimum d'Activités Elargi
CSIS	Centre de Sante Intégré à paquet minimum Standard
CSS	Circonscription Socio Sanitaire
CTS	Comité Technique de Suivi
DDS	Direction Départementale de la Santé
DGB	Direction Générale du Budget
DHS	Demographic and Health Survey
ECOM 2005	Enquête congolaise auprès des ménages
EDSC – 1	Enquête démographique et de santé du Congo
ESISC-1	Enquête de Séroprévalence et sur les Indicateurs du Sida du Congo 2009
FDI	Foreign Direct Investment
HRH	Human Resources for Health
IEC	Information Education Communication
ISF	Indice Synthétique de Fécondité
LDCs	Less Developed Countries
MDGs	Millennium Development Goals
MSF	Médecins Sans Frontières
NA	Non applicable
PNLS	Programme National de Lutte Contre le SIDA
PNS	Politique Nationale de Santé
PRS	Poverty Reduction Strategy
RESEN	Rapport d'Etape du Système Educatif National
RGPH_07	Recensement Général de la population et de l'habitat 2007
SSA	sub-Saharan Africa

1 Introduction: Motivation, Purpose, Background and Methodology

By considering a singular case of a small village in Congo Brazzaville, the paper implicitly aims to re-consider a basic question in health economics: How and why are health resources to be allocated efficiently and equitably? This question is very relevant due to the recent global debate regarding the allocation of scarce resources to the most needy. The debate is:

> "couched in the language of 'efficiency', where the social returns for a given level of transfers are higher for individuals or households at the lower end of the income distribution than at the upper end." (Nkandawire, 2002: 5).

The background to the political economy of domestic resource mobilisation for designing pro-poor policies contrasts with the recent literature whose attention has largely been focused on the external sources of development finance, such as debt relief, increased aid and its effective use, and foreign direct investment (FDI) especially on their quality, efficacy, predictability, and the ability of donors to meet set targets.

On the other hand, one of the many reasons for working in this direction is the empirical evidence in the LDCs. According to the available results regarding the implementation of the MDGs, deaths of children under the age of five (Goal 4) remain unacceptably high and the high risk of dying during pregnancy or at childbirth (Goal 5) continues unabated in sub-Saharan Africa and Southern Asia.[1] This example is sufficient to underline that increased spending alone does not automatically improve results; the process of understanding the mechanisms and issues that affect the transformation of financial inputs into development outcomes is central to improving the use of public and aid funds. In the specific case of SSA with its approximately 12% of the world's population, many countries are still far from the international targets, such as those of the Abuja Declaration (2001),[2] the Commission on Macro-economics and Health. The challenges in this case are based upon the following situation: 25% of the global disease burden, 68% of the people living with HIV/AIDS, as well as the highest disease burden of TB and malaria in the world. In contrast with this picture, Africa accounts for less than 1% of global health spending and contains only 2% of the global health workforce. (African Union: 2009 ii).

The case of Congo Brazzaville, which represents an emblematic, concrete and interesting case which illustrates health financing mechanisms in developing countries,

[1] See the UN Commission on MDGs, available at: http://www.un.org/millenniumgoals/maternal.shtml.

[2] Which set a target for all African countries of 15% of public spending for health.

will be investigated. Despite the fact that the international aid architecture is changing by increasing its focus on health,[3] and the fact that several governments have promised to increase investments in health, etc., the results are not satisfactory. The initial basic question has to be re-considered in order to implement or to bring pro-poor strategic health policy in line with the Macro-economic and Health Plan and the targets of the Millennium Development Goals (MDGs), which are:

- to re-allocate resources and services by targeting poor and vulnerable people directly;
- to concentrate on disease and conditions of the poor;
- to reduce burden of direct out-of-pocket payment for health services
- to improve the supply and effectiveness of non-personal public health services; and
- to advocate and participate in intersectoral action to achieve health gains.

This paper is divided into two parts: in the first part, the presentation of some key concepts for the case Congo Brazzaville will be given; in the second part, an analyse of the prospects for the rural population, illustrated by the author's personal experience with the farmers of Moubangou, will be reported. In the second part, there is also a sub-section which presents the way in which a communitarian answer might be local funding of the project. The method used is both descriptive and applicative from a managerial economics perspective.

2. Factors Explaining the Mechanisms of Health Financing in Congo Brazzaville

Congo Brazzaville is a case which highlights one of the recent topics in development economics on how to reconcile efficiency and equality, and to overcome the urban bias.[4] The results of the Enquête Démographique et de Santé au Congo 2005 (EDSC-1 2005) regarding the correlation between migration and health, and between non-poor and poor household revenues, are very eloquent to illustrate what has previously been stated. The first correlation confirms that, in Congo Brazzaville,

[3] For instance, the top 3 priorities of U.S. foundations in international grant-making are health (49%), education and basic social services.

[4] With the question of "informal activities", this question is newly treated in development economics but without "référence à des pays modèles (ou repoussoirs) ou historiques". In the past, "la référence à l'histoire économique des pays industrialisés constituait le support premier des politiques, avec deux modèles alternatifs –l'un d'une économie de marché, l'autre d'économie planifiée. L'optique était délibérément macroéconomique quelle que soit l'option"(Assidon: 2002, 7).

households move mainly for medical reasons (31.5%), then to seek and obtain new jobs (11.6%), for lack of security in the living environment (6.4%), and in order to settle in new houses (4.4%). The second correlation highlights huge inequalities in revenue distribution, annual expenditure being on average F CFA[5] 191,000 (equivalent per adult) for poor households against F CFA 615,000 for non-poor households, which corresponds, respectively, to a daily expense of F CFA 523 and F CFA 1,685, which is three times more. The present picture is partially due to the civil wars, which occurred between 1993–2002,[6] which was responsible for further deteriorating both the health system and the living conditions of the country in general (Ambapour: 2006). Other reasons for focusing on Congo Brazzaville include the mortality rate for pregnant women and for women in childbirth (781/100,000; WHO: 2009). On the purely financial plan, it is important to note that the government assures a large part of health financing but the budget allocation shows that the Centre Hospitalier Universitaire (CHU) of Brazzaville receives from 50 or 60% of the capital budget (CB) every year while the rest of public basic hospitals receive from 25 to 35% (WHO: 2004).

The data in this section come from the following sources: the Congo government, specifically from the minister of health and population; the minister of financing and economy, the minister of development, the minister of social affairs, the minister of planning; WHO (African Regional Office based in Brazzaville); the Enquête Démographique et de Santé au Congo 2005 and the Enquête de Séroprévalence et sur les Indicateurs du Sida du Congo 2009 both carried out and published by Centre National de la Statistique et des Etudes Economiques (CNSEE) and ORC Macro. However the EDSC-1 2005 represents the main source as it was performed by the CNSEE with the technical assistance of the ORC Macro, an American Institute for Co-operation which is in charge of international programmes for inquiries into demographic and health surveys (DHS). Last, but not least, the Enquête Congolaise auprès des Ménages pour l'Evaluation de la Pauvreté (ECOM 2005) is a precious source in use here because it gives a

[5] F CFA means Francs Communauté Financière Africaine used in 13 countries in Africa. 1 Euro = 655 F CFA.

[6] It is possible to divide the last civil wars into four rounds. Round 1 (1993-1994): after the first round of legislative elections, the opposition leaders, claiming fraud, called for a boycott of the second round and civil disobedience. Round Two (1997): violence began again in May 1997 and by June, Brazzaville was split into three militia zones (Ninja, Cobra, & Cocoye). The Cobras, who were initially outgunned, had their fate changed in October 1997 when a contingent of heavily-armed, battle-hardened Angolan troops intervened on their behalf. Their leader (the current president) won and the two others fled into exile. Round Three (1998-1999): it was basically a party: the new president and Angolans versus the southern militias. The fighting spread back to Brazzaville towards the end of 1998, when a Ninja force raided the city's outer suburbs. In December 1998, the fighting peaked but skirmishes continued throughout the south until mid-1999. Round Four (2002): basically a prolongation of the precedent round isolating the Pool region in the south of Brazzaville.

radioscopy of living conditions in Congolese households. It was performed by the CNSEE from June to August 2005 in all the national territory. The work target of all these documents is to obtain indispensable demographic and health indicators in order to set up policies and programmes, in particular those related to the Poverty Reduction Strategy Paper (PRSP) and the implementation of the MDGs.

This section aims at answering to the following questions: which are the prevalent health policies from the independence and what is the current socio-demographic situation? What is the current operational and administrative health system? How does the financing of current health programs work in Congo Brazzaville? Which are the lessons and recommendations from the previous description?

The part will be divided by four sections, each one trying to answer to the questions above.

i) Overview of the National Health Policies in Congo

After independence in 1960, the Congolese government chose a Marxist-Leninist regime that was fully established in 1968. Consequently, from 1968 to 1991, the government was in charge of the entire health system and care, in health centres and hospitals, was totally free. There were no private health structures except the medical and social centres of some companies. From 1987, with the economic crisis, hospitals and other health centres began to lack medicines. The budgets assigned by the government to health system were reduced, and hospitals and health centres began to charge for consultations and for prescription drugs. Most of the health professionals began to work in the private sector, which was flourishing. In both private and public structures, the cost for overcoming about of malaria is, on average, F CFA 8,000 i.e., 2,000 for consulting a doctor and 6,000 for the purchase of medicine. Gradually, the basic health services became inaccessible to the vast majority of the population. But having the regional office of the WHO in Brazzaville, Congo is disposed to subscribe to the statements and the major international acts relative to health in Africa. Before the Copenhagen Plan (20/20), the government promulgated the law N 014-92 of 29 April 1992 institutionalising the National Programme of Sanitary Development (Programme national de développement sanitaire) (PNDS). For its application, the first PNDS (1992-1996) was set up, and focused on the following points:

- the division of the national territory in socio-sanitary districts (circonscription socio sanitaire) (CSS);
- the creation, by decree no 95-3 of 4 January 1995, of the Comité Technique de Suivi of the PNDS (CTS/PNDS), with a clear vision of a participatory and intersector-based approach in the analysis, definition, and evaluation of the problems related to health;
- the rationalisation of the Centres de Santé Intégrés (CSI);
- the evaluation of the implication of local communities in the planning and implementing of health activities.

In May 2000, the Politique Nationale de Santé (PNS) was adopted, with the global purpose to promote and protect all Congolese by guaranteeing them access to good quality health services.

The PNDS 2005-2009 is a consequence of the previous programme and remains based upon:

- the right for all Congolese to good health;
- equality in access to good quality health-care.

The PNDS strategies are based upon the Bamako initiative. After a while, the following problems arose:

- the coverage of the different CSS remains very weak;
- the great majority of CSI are badly set up;

- the persistence of poverty which reduces financial accessibility, hence reduces access to quality health-care;
- the absence of the health insurance;
- purchase of drugs is not possible for an average Congolese income;
- community participation is not sufficient to insure the financing of the health system.

ii) Significant data on demography and Health Services Accessibility Demography and Health Services

According to the last data of the RGPH_2007, the following scenario can be observed in Congo:

Table 1: Resident population by Region

	Total	Men	Women	Surface in km²	Density hbts/km²
CONGO	**3,697,490**	**1,821,357**	**1,876,133**	**342,000**	**10.8**
KOUILOU	**91,955**	**46,976**	**44,979**	**13,650**	**6.7**
NIARI	**231,271**	**112,942**	**118,329**	**25,941.7**	**8.9**
LEKOUMU	**96,393**	**45,877**	**50,516**	**20,950**	**4.6**
BOUENZA	**309,073**	**148,523**	**160,550**	**12,265.4**	**25.2**
POOL	**236,595**	**115,026**	**121,569**	**33,955.2**	**7.0**
PLATEAUX	**174,591**	**84,446**	**90,145**	**38,400**	**4.5**
CUVETTE	**156,044**	**76,373**	**79,671**	**48,250**	**3.2**
CUVETTE - OUEST	**72,999**	**35,538**	**37,461**	**26,600**	**2.7**
SANGHA	**85,738**	**42,992**	**42,746**	**55,800**	**1.5**
LIKOUALA	**154,115**	**76,850**	**77,265**	**66,044**	**2.3**
BRAZZAVILLE	**1,373,382**	**677,599**	**695,783**	**100**	**13,733.8**
POINTE-NOIRE	**715,334**	**358,215**	**357,119**	**43.7**	**16,369.2**

Source: CNSEE and UNFPA, RGPH_2007

The country is one of the least populated in Africa (classified number 129). Unevenly distributed, about 82 % of the population lives in the four regions crossed by the Chemin de Fer Congo Océan (The Congo Ocean Railway) (CFCO). Congo is among the most urbanised countries in Africa: about 58 % of its population lives in big towns.

Table 2: Reasons for not using available health services

	Brazzaville	Pointe-Noire	Other Towns	Rural	Total
Poor					
Not necessary	40.0	34.2	17.1	21.9	25.9
Too expansive	50.5	57.9	69.4	68.45	62.2
Too far	0.5	0.0	1.5	5.0	4.8
Other	10.9	9.9	22.5	8.2	11.6
Non Poor					
Not necessary	48.4	46.4	33.6	37.55	41.3
Too expansive	42.3	45.3	51.2	53.95	48.5
Too far	1.0	0.0	0.9	7.25	4.0
Other	9.7	9.0	19.1	6.1	9.6
Total					
Not necessary	43.6	42.0	25.1	28.6	33.0
Too expansive	46.9	49.9	60.6	62.2	55.9
Too far	0.7	0.0	1.2	6.05	4.5
Other	10.4	9.3	20.9	7.3	10.7

Source: author's computation on the basis of EDSC-1 2005 data.

According to the results of EDSC – 1 2005, the main important reason for not approaching the available health structures is the high cost of treatment (55.9%). This reason is especially due to 50.5% of the reluctant patients of Brazzaville and grows gradually to reach 68.45 % in rural areas. The second reason is the no necessity to consult a doctor or other health professional. In reality, behind this hesitation, a lack of financing, which could not motivate the potential patient to do so, can be dissimulated.

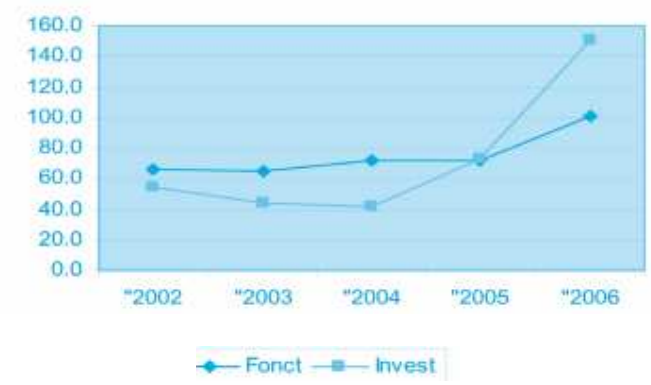
The "not necessary" can also represent an important problem of auto medication (Ministère de la Santé, des Affaires Sociales et de la Famille: 2008).

Table 3: Structure consulted in case of disease

	Brazzaville	Pointe-Noire	Other Towns	Rural	total
Poor					
Medical cabinet, private hospital	28.5	32.0	31.3	23.15	26.2
Dispensary, public hospital	39.0	36.5	30.8	42.45	37.6
Centre de santé intégré	5.4	7.2	4.7	2.1	4.1
Doctor, private dentist	2.4	1.0	3.7	1.3	2.1
Traditional healer	5.6	10.2	16.3	11.55	10.1
Church	4.8	2.6	3.9	4.5	5.0
Pharmacy, pharmacist	13.1	9.8	7.6	11.9	11.5
Other	1.2	0.7	1.7	3.0	3.3
Non Poor					
Medical cabinet , private hospital	36.8	39.7	31.5	22.85	30.2
Dispensary, public hospital	44.1	38.2	40.5	43.15	41.6
Centre de santé intégré	4.4	5.2	3.1	4.1	4.4
Doctor, private dentist	2.9	2.8	3.8	2.25	2.9
Traditional healer	3.4	3.8	10.2	12.5	8.6
Church	2.7	1.1	2.5	2.55	2.3
Pharmacy, pharmacist	4.9	8.6	5.9	10.95	8.3
Other	0.8	0.7	2.5	1.7	1.5
Total					
Medical cabinet, private hospital	32.4	37.5	31.4	23.05	28.3
Dispensary, public hospital	41.4	37.7	36.2	42.75	39.6
Centre de santé intégré	4.9	5.8	3.8	3.0	4.3
Doctor, private dentist	2.6	2.3	3.8	1.7	2.5
Traditional healer	4.6	5.6	12.9	11.95	9.3
Church	3.8	1.5	3.1	3.6	3.6
Pharmacy, pharmacist	9.2	8.9	6.6	11.5	9.9
other	1.0	0.7	2.1	2.4	2.4

The picture is a problem for a country in which the financing of the health is essentially insured by the state. The percentage of this financing varies, for instance, between 71.6 % and 97.4 % from 2002 till 2005. The rest in this case is financed by the international help mechanisms (WHO: 2009). The government uses the Cadre de Dépenses à Moyen Terme (CDMT), which is the budgetary instrument which accompanies the implementation of the poverty reduction strategy (PRS). However, compared with other African countries (low/intermediate income), the public financing of the social sectors remains rather weak. Moreover, the problems related to mis-management in public finances have, as a consequence, the fact that executed spending diverges radically from the budgeted spending, especially in the social sectors. This is confirmed from the data from 2002 to 2006:

Table 4: execution rate of capital budgets and functioning from 2002 to 2006



Source: WHO 2009

As consequence of the previous graph/figure/table, the incidence of poverty increases according to the area in question (EDSC – 1 2005): in rural areas, 64.8% (44.2% of the population) and semi-urban 67.4 % (9.4% of the population), 58.4% in the other municipalities (6.8% of the population) and 42.3% in Brazzaville (24.2% of the population) and 33.5% Pointe-Noire (15.5% of the population). More specifically, the degradation of the social situation has bad repercussions on children because of their level of hardship in general.

Table 5: Incidences of children poverty in various dimensions of well-being (%)

Dimension of the well-being	Monetary	Education	Nutrition	Health	Labour	Water and purification	Habitation	Enclosing
Incidence of hardship	53.7	52.5	43.7	44.0	5.6	69.9	61.6	33.8

Source: UNICEF (2008), La pauvreté multidimensionnelle des enfants et des femmes au Congo

3. Designing and Implementing pro-poor Health Financing Schemes: the Case of Moubangou (District of Kimongo)

In rural areas in Congo, medical cure remains one of the most difficult problems which needs sustainable solutions. The above analysis indicates that the direction to be followed consists of improving access to a cost-effective and technically-simple intervention. Due to the presence of 66% of physicians in Brazzaville, it is clear that the availability of well-trained, well-motivated and well-deployed human resources for health (HRH) could determine changes across rural Congo. The challenge here consists of defining tools to estimate human resource requirements for improving health-care in poor areas.

A second challenge is the costs (the main interest of the paper), which should take into account the concrete fragility of the rural populations and the performance of the government in budget implementation (see the above results on access to health services). In this way, the districts of Kimongo and Londelakayes were representative of the situation and needed an improvement in health outcomes. Kimongo is the most populated of the 14 districts of the Département[7] of Niari in South-west (about 400 km from the capital Brazzaville). The area of Kimongo and Londelakayes is populated almost exclusively by subsistence farmers belonging to the Sundi ethnic group.

The linguistic factor is a very important comparative advantage in order to conduct projects in rural Congo, since there are about 52 ethnic groups and the low level of education cannot guarantee the use of French as common language. The area borders with Angola and DRC, which gives us the opportunity to observe the same phenomenon in these two countries, since these populations share part of their commerce because they speak the same language and have multiform cultural linkages. This part of the paper reports the author's experience with the farmers of Moubangou (one of the 58 villages and hamlets which form the district of Kimongo) on the same latitude with Dongo (DRC) and Mukondzi (Angola). The base is Moubangou but the participation of the other villages is patent. The experience consisted of building a medical service that should begin to work soon. The project was approved by the regional and national health authorities because it was in conformity with décret no 95-3 of 4 January 1995, allowing a participatory system in order to set up a well-functioning delivery structure near to the households in need. All these advantages led the author to examine changes by primarily testing the social capital of the area.

[7] In Congo, as in France, the Regions are called *Départements*.

The basic question was: How to measure social capital? This question pushed the author to observe the attitudes of the population towards co-operation by considering the number of formal and informal co-operatives across the different villages, the participation in voluntary associations, the compliance with taxes, etc. In order to be more precise, it was decided to conduct a household survey. The household survey conducted by the project is based upon a two-stage clustering procedure. The first stage consisted of selecting clusters of households according to the size the different selected villages. The second stage regarded the respondent households in each village or cluster. Between Kimongo and Londelakayes, 400 questionnaires were completed. The sample is a true indication of the population. The individuals selected were household members aged from 20 to 65. The average number of adults per household in Kimongo and Londelakayes is 3. Thus, 400 households should yield about 1,200 data points. The results confirm the main EDSC-1 2005 indicators regarding access to health services. The second stage experience gives the following results: the creation of an association named Pont d'Amour under the technical assistance of Médecins d'Afrique, a NGO based in Brazzaville and engaged in public health policies and implementation, and organising meetings with the populations, under the form of focus groups. Tthe last meetings were structured as follows:

1. Research Hypothesis

Correlation between social networks and health: strong networks are very important in order to build a shared and efficient health system; the benefits of the new health system are equally distributed when the social networks are consolidated.

2. Research Objective

Exploration of how social networks work in order to know how to finance and implement the project.

3. Research Activities:

Step 1: the identification of the situations: selecting villages involved in principal and secondary villages/locations. The villages considered as principal were: Nganda-Mbinda, Moukondzi, Moukéké, Koumina, Moubangou, Kitessi, and Diambala. The secondary villages: Kifouma, Moukomo Kadi, Mangola, Mpaka, and Koumbou-Diambou. The selection criterion was the number of inhabitants. The principal villages were characterised by a strong form of associationism and many initiatives of local management. Secondary villages were directly linked to the principal ones where it was possible to find different activities.

Step 2: designing the research: research was carried out by questionnaire and focus group. The aim was to identify a strategy to build a collective health system.

4. Results:

Farmers willingness to participate to the project was manifest by donating to PDA lands to be harvested and their crops sold. The results are structured following a project model described in this section:

Setting up a Social Health Centre in MOUBANGOU, district of KIMONGO

1. Association Pont d'Amour (PDA): Local Partner Organisation, responsible of the Project:

Address:

Tel.

E-mail:

Web Site:

2. Location: Moubangou.

See the attached map:

3. Beneficiaries:

3.1 The direct beneficiaries are the inhabitants of the villages around the health district of Moubangou, who are farmers and stockbreeders. The total population is about 20,000 people.

3.2 Selection Criteria of beneficiaries: the main criterion is the vulnerability related to the difficult access to good quality health services.

3.3 Beneficiaries Participation to the project: up to now beneficiaries have participated in the project by providing material, such as bricks and sand required for the buildings. They actively collaborated by taking part to focus groups and by kindly answering different questions on previous surveys. In the future, they will participate in the central management through two structures: the Health Committee and the Health Mutual. The two structures will be linked to the association Pont d'Amour and the government (Circonscription Socio Sanitaire) for elaborating, planning and implementing decisions regarding the centre by:

- participating in the community meetings. The conclusions of the meetings must guarantee both transparency and the adequacy of the strategic activities of the project. For this reason, a draft agreement signed by the Triangle CSS, PDA and the Health Mutual will be required at the end of every meeting;
- checking the performances of the centre through the Health Mutual;
- being having a place on the board of directors.

3.4 Current and Past Relationship between PDA and the Beneficiaries: the main objective of the local partner (PDA) is to strengthen the beneficiary capabilities. The PDA acts in this direction by improving the management system and by refining methods for planning and evaluating. The team of PDA, however, will plan missions of supervision in collaboration with the CSS, which represents the Ministry of Health.

3.5 Explaining the insertion of the project in the existing official programmes at regional and national level and its recognition: the health centre is located in a CSS, which requires the authorisation of the local and national health authorities. In this context, the project was approved in August 2008 with the delivery of the "Attestation d'authorisation d'ouverture du centre" by the Ministry of Health and the population. Presently, the Centre of Moubangou is collocated number 14 at regional level. With this insertion, it joined the network of the public CSIs set up by the Ministry of Health. In this way, the centre is allowed to hospitalise patients, collaborate with the CSS for the vaccination of children and with the most important health centres, etc.

3.6 Previous studies confirming the necessity of acting in this direction: see all the previous presentations on Congo in general and Kimongo in particular.

3.7 Describing the concrete problems that the project claims to solve, explaining the mechanisms which led to identify and to prioritize the problems: The creation of the Health centre aims to improve the coverage of the CSS. It will be an alternative for health-care financing in the absence of a functioning social protection system. The local community will be organised in Health Committee and Health Mutual. This approach involves households with a rather instable agricultural income. It would be a mistake to work with instable income. Risks related to this instability stimulated the same populations of villages surrounding Moubangou to create co-operatives in order to improve the agricultural production and to support certain costs relating to the functioning of the centre. The staff of the PDA will be involved in health and social engineering, encouraging the membership among the farmers, and collaborating actively to improve the co-operatives capabilities.

Work scheme

	Reasons for intervening	Outcomes	Indicators sources
Main Objective	Enhancing the standard of living of the population of Moubangou		
Specific Objective	Improving socio sanitary conditions of the beneficiaries		
Results (BUTS)	Covering quality heath-care at better costs for 20,000 inhabitants		cure rate morbidity rate among the members Attendance rate of the health centre vaccine rate
Activities	Finishing the health centre buildings Equipment: office supplies, laboratory and medical material Recruitment of qualified health personnel Inform population Training for the health centre and the mutual management	Equipped and functional health centre Organised structures Well trained staff	Photos and charge Number of the members of the mutual insurance company Number of trained managers of the mutual insurance companies Number of awareness campaign organised

4. Activities:

Construction of the socio-medical centre

Construction of the buildings for consultation, hospitalisation, a laboratory and a childbirth room.

Office and medical equipments

Medical, movable equipment are mainly provided by the PDA in collaboration with some Italian NGOs.

Generic and Essential Drugs

The centre is endowed with an initial stock of essential and generic drugs.

Promotion of the health mutual

The health mutual tries to stimulate a full participation of the beneficiaries in the processes of pre-mutualisation and the mutualisation. They have created co-operatives in order to guarantee participation by using new agricultural techniques which are able to improve the production.

Coverage of the mutualists

According to the approach chosen by the beneficiaries, who are usually constituted in co-operatives, the health centre will have to supply a minimum package of health-care to the population. The coverage is assured by the mutual insurance company with a rate of coverage fixed at 50% of the population contribution with the participation of the government through the CSS contribution (which pays part of the personnel).

Instruction of local populations on the basic rules regarding good sanitary practices:

Awareness campaigns will be organised to reduce common endemic diseases.

Training

This training will have to approach the following themes: responsibilities and rights of the participants to the Health Mutual. Six courses for at least 15 administrators of the different co-operatives.

5. Duration and calendar of the Project

Planning

January 2008 – December 2009

- Construction of the buildings
- Purchase of materials
- Recruitment and formation of the personnel
- Health Committee organisation
- Engineering related to the setting up of the Health Mutual

October 2010

- Beginning of medical activities
- Continuation of Health Mutual Membership

Committee of project management

It is composed of:

Pont d'Amour is the main manager of the centre in collaboration with the Health Committee. The PDA insures the functioning of the centre as well as the training of the staff and the Health Committee. In partnership with the Health Committee, the PDA organises campaigns on malaria, hygiene diseases related, HIV/AIDS, etc. In commitment with the CSS and the Health Committee, the PDA plans the interventions in favour of the local population.

The Health Committee participates in the socio medical centre and in the management of the co-operatives. It insures that the co-operatives participate actively to the functioning of the centre. It will play a special role in monitoring and evaluating the performance of the centre. Its implication concerns the mobilisation of the population for improvement of the quality of the production of the co-operatives and the centre's quality of cure. The committee is a part of the board directors in both the socio medical centre and the co-operatives.

The CSS is the legal representative of the Ministry of Health and Population within the area of health, it intervenes by working to health improvement, supervising HRH training, providing and paying a part of the medical centre personnel, supporting the centre in material terms, for example, with vaccination kits. It co-ordinates and plans health activities in the area and associates the centre for implementation of its programmes. The CSS is part of the board of directors.

Procedural and impact Indicators of the Health Mutual

- number of members;
- number of information campaigns organised;
- morbidity rate among the members;
- mortality rate among the members;
- frequency rate of the health centre;
- spending evolution with the beneficiaries;
- resignation rate;
- coverage rate by the health mutual.

Table 6: Material means and human resources: Budget in Euro

	LOCAL PARTNER(PDA)	Local populations	Government and Others	Total
Conception/Elaboration	See president PDA			
Lands	See president PDA			
Construction	See president PDA	Elaborated bricks		
Equipment and Materials	See president PDA			
Personnel	27, 120			
Working capital				
Capacitation/Formation	1,067.00			
Running costs	12,086			
Administration costs	793.00			
Total				

6. Human Resources

Description of HRH: Number, titles and diplomas, experience, salaries, residence

Mention	Diplomas	Experience	Salaries	Residence	Quantity
Team co-ordinating the project					
Co-ordinator	Ph.D. in Medicine		600	Brazzaville	1
Secretary Accountant	*Brevet supérieur en comptabilité et gestion* (BTS)		300	MOUBANGOU	1
Secretary in charge of logistic techniques	*Brevet technique supérieur* (BTS)		230	MOUBANGOU	1
Medical team of the health centre					
Assistant sanitaire chef de centre	*Licence in medecine*		380	MOUBANGOU	1
Nurse	Diploma of Nurse (Loukabou)		180	MOUBANGOU	2
Laboratory assistant	*Diploma of technicien de laboratoire*		180	MOUBANGOU	1
Midwife	*Agent technique de santé* (Loukabou)		180	MOUBANGOU	1
Help laboratory assistant	*Agent technique de santé*		120	MOUBANGOU	1
Centre Guard and hygienist	NA		90	MOUBANGOU	1

Number of consultations and patients per year: Main motives for the visits. Tariff of the various services:

- Curative medical consultations: Adult: FCFA 3,000; Child: FCFA 2,000;
- Antenatal consultations: FCFA 19,500;
- Delivery: FCFA 25,000;
- Vaccine: free in collaboration with the National Programme of vaccines.

The centre expects 7,200 consultations per year and the most frequent motive for consultation is malaria followed by respiratory infections. The rate of malnutrition is about 20% according to the national statistics. The prevalence of HIV/AIDS is 4.2%, and 70 % of the population lives below the threshold of the poverty.

The health committee will have the special role of identifying vulnerable individuals within the community. These vulnerable persons (physically and mental handicapped individuals, old people, large families with low income) will benefit from free care and/or reduced prices.

4. Local Project Funding: a Communitarian Answer

As previously mentioned, the last focus group with the village headmen gave rise to an unprecedented initiative: villages gave up part of their lands to support the project financially.

One of the main objectives of donating land, apart from financing the health centre, was to find a way to create co-operatives and new sustainable jobs. Since Congolese agriculture employs more than 65% of the working population, but can satisfy only 30% of the internal food needs, the opportunity was important for meeting the challenges of an agricultural situation characterised by a potential under-exploitation. Congolese agriculture is one of the least productive in the Central African area, despite the abundance of farmlands on the national territory, and the Congolese government spends about 120 billion FCFA per year in importation of foodstuffs (FAO, 2005). In general, the importance of coming to grips with agriculture in Congo lies in the problems related to food security. Returning to the urban bias phenomenon, the empirical evidence shows that successful agriculture satisfies the demand for food, creates jobs and can work as a factor to contain the urbanisation phenomenon.

Helped by agricultural technicians, the PDA association made a mission to inspect the ground and to estimate different variables from 15 to 16 September 2010. The estimation of the situation also aimed to contribute to decrease the food dependence of the villages visited. In this short time, the team was able to realise that the rise in the prices of foodstuffs justified by a great lack on the supply-side will never be offset by policies linked to regulations. It is question of improving agricultural methods, training, implementing mutual insurance savings companies, distributing improved seeds, etc. All these factors should allow the farmers to sell their surplus production.

However, the experience and the limited financial possibilities of the Association could not allow the implementation of projects in every village. At the end of this visit and due to the available financial means, the main conclusions propose the setting-up of a productive activity of that would be ready in 3 or 4 months. The development of this idea should allow the following to be achieved in the beginning:

- 5 hectares of horticulturist cultivation (tomato, onion, cabbage, pepper);
- 2 hectares of food crop (corn and groundnut).

The programme of development of the cultivation for the first year going from 1 October 2010 till 30 September 2011 appears as below:

Table 7: Cultivation and harvest-time

Programme of valorisation of the terraces													
Speculation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Total
Cabbage	150	100	75	75	150	100	75						725
Pepper		100	50	50	100	50	100						450
Tomato		25	25	25	25	25							125
Onion							150	100	100				350
Corn							150						150
Total	150	225	150	150	275	175	325	100	100				1,650
Harvest-time													
Cabbage				150	100	75	75	150	100	75			725
Pepper					100	50	50	100	50	100			450
Tomato					25	25	25	25	25				125
Onion											100	100	200
Corn													
Total													

Source: author's computation with the PDA agricultural team

In this way, the plan will be effective by investing F CFA 24, 006, and 600. The period of investment is divided in three tranches: the first period from October to December 2010, the second from January to March 2011, and the last from April to June 2011. The most important investments will be made as reported in the table below for the first three months because of the relative initial costs of a start-up. Following the results of the different studies and discussions, the first three months will be planned:

Table 8: planning financing for the first 3 months in F CFA

	October	November	December	Total
Land ploughing	525,000	483,500	525,000	1,533,500
Agricultural seeds and associated items	574,645	861,960	574,645	2,011,250
Fuel and lubricant	100,000	150,000	150,000	400,000
Transport	100,000	150,000	100,000	350,000
Workforce (guarding)	100,000	280,000	450,000	830,000
Ploughing equipment	1,094,300			1,094,300
Installation watering system		1,826,300		1,826,300
Workforce (watering)		275,000		275,000
Workforce (engineering)	350,000	350,000	350,000	1,050,000
Total	2,843,945	4,376,760	2,149,645	9,370,350

Source: author's computation on the PDA agricultural team

The total investments will allow a profit of more than F CFA 10,000,000. However, considering all the losses and risks, the first year is planned in a way in which the generated profit should not be below F CFA 10,000,000. In the worst of hypotheses, the planned scenario configures as follows:

Table 9: Production and sales estimations

	Number of terraces	Highlighted surface (m²)	Return (kg/m²)	Price(kg/F CFA)	Estimation losses (kg)	Estimation production launched (kg)	Estimation of sales (F CFA)
Cabbage	725	27,168.2	5	125	20,387	115,549	14,443,625
Pepper	450	16,875	3.5	200	8,856	50,205	10,041,000
Tomato	125	4,685	4	200	2,810	15,930	3,186,000
Onion	200	7,500	5	250	4,500	25,500	6,375,000
Corn	150	5,625	3(t/ha)	Na	Na	Na	Na
Total	1,650	61,853.5		775	36,553	207,184	34,045,625

Source: author's computation

5. Conclusions

The results from the paper show that public financing of social sectors, in general, remains rather low. This largely explains the poor quality in health services supply and, also the bad social indicators and insufficient progress towards the achievement of the MDGs. The government of the Republic of Congo has not expressed political willingness to dedicate 20% of its resources to finance the social sectors. The social needs expressed through the sector-based CDMT are always widely above the budgetary allocations. However, even when allocations are budgeted, severe problems persist in their organisation and implementation. This point justifies persistent low execution rates, in particular in essential social sectors: the actual spending diverges radically from the budgeted spending, especially in the social sectors. All this means that the government has to maintain its efforts to purify public finances in order to increase the pro-poor spending durably. The government has to strengthen the technical capacities of the ministerial agents in charge of health sectors, with regard to the exercise of needs and priority definition, in particular their costing and budgetary execution. In this way, the government has to render the process of budget elaboration and execution more participative and more transparent in order to take the priorities and needs of the society into account and to assure the budgetary efficiency execution.

It is in this context that the track of a community answer exploited in the district of Kimongo can constitute an explorative way to search for solutions for a viable and effective sanitary system in Congo. Farmers demonstrate their willingness to participate by giving their only wealth: land. NGOs give the technical knowledge and the government provides qualitative support which confirms its intention to make the system more polyphonic. This is a triangle which needs to be accompanied, and encouraged, until it gives its first results.

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