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**Interventions in targeted health sectors  
and the support of Health System in  
Sub-Saharan African countries:**

“The importance of commitment of the government,  
accountability governance, good leadership and  
management to improving Health System  
performance”

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**Blaise BIKANDOU**

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## List of acronyms

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<b>AIDS</b>	Acute Immunodeficiency Syndrome
<b>ART</b>	Antiretroviral therapy
<b>BCG</b>	Bacillus of Chalmette and Guerin
<b>BTS</b>	Blood Transfusion Service
<b>CNG</b>	Congo-Brazzaville
<b>CMYP</b>	Comprehensive Multi-Years Immunization Plan
<b>DQS</b>	Data Quality Survey
<b>DTP3</b>	Diphtheria – Tetanus – Pertussis
<b>DTP-HepB-Hib</b>	Diphtheria – Tetanus – Pertussis – Hepatitis B – Hemophilus influenza b
<b>EHESP</b>	Ecole des Hautes Etudes de Santé Publique
<b>EPI</b>	Expanded Programme Immunization
<b>EVM</b>	Effective Vaccine Management
<b>GAVI</b>	Global Alliance for Vaccines and Immunization
<b>GDP</b>	Growth Domestic Product
<b>GF</b>	Global Fund to Fight AIDS, Tuberculosis and Malaria
<b>GHI</b>	Global Health Initiative
<b>HBV</b>	Hepatitis B virus
<b>HCV</b>	Hepatitis C virus
<b>HIV</b>	Human Immunodeficiency Virus
<b>HSCC</b>	Health Sector Coordinating Committee
<b>HS</b>	Health System
<b>ICC</b>	Inter-agency Coordinating Committee
<b>IHP+</b>	International Health Partnership
<b>LMIC</b>	Low and middle-income country
<b>MCV</b>	Measles coverage vaccines
<b>MDG</b>	Millennium Development Goal
<b>MOH</b>	Ministry of Health
<b>NAC</b>	National AIDS Council
<b>NAP</b>	National AIDS Program
<b>NCD</b>	Noncommunicable disease
<b>NGO</b>	Nongovernmental organizations
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>OVC</b>	Orphans vulnerable children
<b>PCV</b>	Pneumococcal coverage vaccine
<b>PLWHA</b>	Persons living with HIV/AIDS
<b>PMTCT</b>	Prevention of mother-to-child transmission
<b>RED</b>	Reach Every District
<b>SAGE</b>	Strategic Advisor Group of Experts
<b>SEP</b>	Permanent Executive Secretariat
<b>SMT</b>	Supply Monitoring Tool
<b>STD</b>	Sexual Transmitted Diseases
<b>STI</b>	Sexual Transmitted Infection
<b>TB</b>	Tuberculosis
<b>TT</b>	Tetanus
<b>TTI</b>	Transfusion Transmissible Infections
<b>UNAIDS</b>	United Nation Program against AIDS
<b>Y.F</b>	Yellow Fever
<b>VCT</b>	Voluntary counseling and testing
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>UNGAS</b>	United Nations General Assembly
<b>UNICEF</b>	United Nations for Children's Fund
<b>USAID</b>	United States Agency for International Aid
<b>W.B</b>	World Bank
<b>WHA</b>	World Health Assembly
<b>WHO/AFRO</b>	World Health Organization – Regional Office for Africa

## Introduction

Most of countries in developing world, mainly those in Sub-Saharan Africa, are still facing huge issues in delivering basic and essential health care services to their populations. That is especially more worrisome and unacceptable for the most vulnerable people who are more and more numerous in most of these countries. Beyond the limitation of the financial resources, there are other weaknesses in the components of health systems building blocks such as in the leadership and governance, health workforce, health financing, medical products, vaccines and technology, service delivery and health information system. At the same time, those countries' operating environments tend to become increasingly complex and challenging given the complexity of aid environments. In fact, there have been an increasing number of communicable diseases and chronic non-communicable diseases, due to the scarcity of funding resources in the context of worldwide economic crisis. Consequently, assistance to these developing countries should be well tailored to adjust to any expected change and impact on people, especially those in real need.

Although most actors agree that strengthening the whole health system is the best way to deliver health services to people, during the past decades, several international donors and funding agencies have prioritized to focus their assistance on targeted sectors. Amongst the burdens faced by developing countries, the blood transfusion safety, vaccine and immunization and HIV/AIDS have received more attention from bilateral or multilateral funding agencies, including the United Nations System and private donors. However, it seems like the positive impacts on the well-being of communities are not always clear, even with a substantially support for a significant period of time. Do the technical and funding assistance provided to targeted health sector in developing countries lead to the improvement of health system performance? In other words, is the whole health system catching up with the benefits of the funding assistance injected in some its sectors?

We have evaluated factors related to health system performance in the context of sub-Saharan African countries. Based on the comparison of two selected countries (Congo-Brazzaville in central Africa and Togo in West Africa), we've analysed the link between vertical interventions and the effect on their respective health systems. Where it has failed, we have figured out and highlighted the consequences of inadequate governance, leadership as well as good management on the control of outbreak (HIV and diseases preventable by vaccines) in both countries.

After brief clarification between supporting the health system and strengthening it, we've evaluated why it is absolutely necessary to build the capacity to respond to population's needs. At the same time, we've mentioned the importance of building the resilience of health systems in most of Sub-Saharan African countries in the face of political unrest, which somehow reflect of the lack of specific skills, long-lasting economic crises and unpredictable events in a rapid changing world.

Some recommendations (short and medium-term) aim at addressing and solving the immediate issues and challenges in health systems, taking into account the scarcity of funding resources and increased burden (communicable and chronic non communicable diseases) these countries face in the context of worldwide economic crisis, are described in paragraph V of this dissertation.

## 1 - Material and Methods

The study utilized a mixture of methods to explore the functioning and global performance of the organizations in the two sub-Saharan African countries (fig.1): Congo-Brazzaville (central) and Togo (west). Although these selected countries are “French-speaking” areas, beyond their geographical distance, they also had some diversity in term of their socio-economical profiles, as well as the pattern of public health, although both countries are facing the burden of high prevalence of communicable diseases and rapid increasing of chronic non communicable diseases burden.

We have chosen three organizations where the performance is closely linked to health system performance and impact on health's people. These are Blood Transfusion Centres, Vaccines and Immunization Systems and National HIV/AIDS Councils. In addition to common indicators, we've integrated some others related to the coordination and services delivery. We've tried to figure out to what extent these vertical interventions on Blood transfusion, vaccination and HIV/AIDS have contributed, at least partially, to the reinforcement of countries' health systems.

The study employed two complementary approaches for data collection:

- (i) The first was a review of the literature and databases
- (ii) The second was brief interviews with senior institutional/organisational officials coupled with sites visit.

Based on these approaches, the study aimed to understand:

- a) the extent to which National Blood Centre, Expanded Vaccines Immunization Program, and National AIDS Centres have achieved their goals and the challenges they face.
- b) stakeholders' knowledge and experience on the effects of Global Health Initiatives on country health and HIV/AIDS, including national and sub national structures of coordination
- c) key factors enabling or inhibiting the effective functioning of these coordination structures that remain despite (or resulting from) GHI financed programmes
- d) Key factors that limit the effectiveness of the functioning of national and sub national structures

## **2 - Results and discussion**

### **A - Blood Transfusion and Safety**

#### **I – Brief Introduction in blood transfusion and safety:**

More than 536 000 women die each year during pregnancy or childbirth, 99% of them in developing countries (1). Haemorrhage is the principal cause of maternal deaths worldwide, accounting for up to 44% of maternal deaths in some areas of sub-Saharan Africa. Up to 20% of maternal mortality and 15% of child deaths have been attributed to severe anaemia due to malaria in the Southern African Region (2). According to the World Health Organization (WHO), blood transfusion is responsible for up to 5% of HIV transmission in sub-Saharan Africa (3). Many more recipients of blood products are infected by hepatitis B and C viruses and syphilis (4).

The onset of HIV/AIDS pandemic in 1981 brought blood safety into global attention. In developed countries, the lessons learned from the legal, financial and public health consequence of the HIV/AIDS crisis have led to effective implementation of blood safety policies (4).

In Congo-Brazzaville and Togo like in most of developing countries, transfusion transmissible infections (TTIs) are still a cause of grave concern. These countries still rely on unsafe family/replacement or paid donors and are unable to consistently screen all the donated blood for TTIs in a quality-assured manner (5). This should also include improving equitable access to safe blood, considering that severe bleeding during and after delivery is the commonest cause of maternal mortality. In order to eradicate transfusion transmissible infections as well as achieving the health-related Millennium Development Goals (MDGs n°4 and n°5), Governments of Congo-Brazzaville and Togo have been committed to safe blood access by the improvement of their national systems of blood transfusion. Therefore, they received substantial financial support from international health and development donors to implement their respective blood transfusion system development plan.

#### **II- Congo-Brazzaville**

##### **1) Context of blood transfusion in the Republic of Congo:**

From the World Bank (2005-2011), the government of Congo received about US\$19 million for HIV/AIDS and health project (Country Assistance Strategy and Rationale for Bank Involvement – Multi Aids Program) in which \$3,722,796 were allocated to the reinforcement of blood safety system ( in addition to the annual budget of \$962,085 from the government).

As shown in the table I, the overall performance of the system was rather limited, taking into account the financial resource mobilized. In fact, based on recorded data between



2005 and 2011, key performance indicators show some improvements. But, other aspects did not.

**2) Although there are some reasons for satisfaction**, governance, leadership and overall management of the system remain poor.

✓ National blood policy and regulation was implemented - Management Procedure of BTS was partially implemented - Supervision of blood system was partially conducted - Blood transfusion guidelines and Good Practices were not implemented - National blood transfusion advisory committee was not implemented - Guidelines and processes for control analysis and compatibility were not implemented - Tracking system and haemovigilance system were not implemented - Regular blood donors were not vaccinated against HBV - The cost of the blood product delivery was unchanged and remained inaccessible for the vast majority of the population and poor communities where people need minimal subsistence for their life- Funding from the national budget available for the BTS has been increased (budget increased twice compared to 2005) - The well-trained and qualified personal was rare. Moreover, there was not specific training plan at any level in the system.

**3) In connection with governance, leadership and a management** which remain rather averages, indicators show variable trends, some were good whereas others were unchanged or bad (from 2005 to 2011):

- The total number of blood donation increased from 33 508 to 52 950 - The number of qualified blood units also increased from 33 508 to 47 994 - The percentage of unpaid blood donation versus percentage paid donor changed, from 10% to 50% versus 30% to 10%, whereas the percentage of the family donors declined - All blood units (100%) screened “according to WHO standards, meaning screen against HIV, HBV, HCV and Syphilis. Unfortunately, only the whole blood products are provided, meaning that the various components of the blood are not separated
- Despite a slight decline, the total number of blood units re-tested (HIV+ and HIV-) with “correct” results remained high (3.5% versus 2.6%). Similarly, the estimate of the residual risk of transfusion-transmitted HIV - Incidence rates and RR of transfusion-transmitted HIV infection was significantly high (1/25.600 whereas it's 1/2.500.000 in France) and the Number of HIV incident cases was 22 (between 2002 – 2008) versus 7 in Togo
- The percentage of unsatisfied demands from paediatrics and obstetrical services has not been measured. However, according to the WHO/Regional Office's data, around 20% of maternal deaths are still due to postpartum haemorrhage.

**4) In summary:** Although some progress has been made through the World Bank funding as well as the government support, the Blood Transfusion System is not efficient enough. Moreover, the governance, leadership and management of the system are still a matter of concern in Congo-Brazzaville, which require some changes.

### **III – Togo**

**1) Context of blood transfusion in Togo:** The socio-economic and political difficulties associated with low qualified human resources occurred in this country lead to the erosion and degradation of the health system, including blood transfusion system. As shown by selected indicators, the blood transfusion was not safe (the percentage of blood donations with positive viral serology: 11% (2% in Lome versus 4.8% in Sokode for HIV and 6.6% versus 16.5% for HBV, respectively) – Rate of unqualified blood donation: 7.8% fixe site versus 14.5% for mobile site. In order to improve this sector, the government created a National Blood Transfusion Centre. They also developed a National Blood Safety policy with pledged for funding from international donors to implement it.

From the French Agency for International Development (2006-2011), the government received about \$4,938,340 (additional to the annual budget of \$109,033 from the government).

As shows in the table I, the overall system is performing well. In fact, based on the comparison of recorded data in 2005 and 2011, some key performance indicators show significant improvement.

#### **2) The leadership and overall management of the system are satisfactory.**

- ✓ The national blood policy and regulation was in implemented and the management procedure of BTS in place - The periodic supervision of blood system throughout the country was conducted - The blood transfusion guidelines and good practices were also implemented - There was a functional national blood transfusion advisory committee, as well as a tracking system for haemovigilance – The guidelines and processes for control of analysis and compatibility were implemented and functional.
- ✓ All (100%) regular blood donors were vaccinated against HBV.
- ✓ The cost of the blood product delivery has decreased (2/3 from the previous fee) even though it remains inaccessible for the majority of the population and weighs down the burden of the healthcare costs for the communities.
- ✓ Funding from the national budget allocated for the BTS has increased (x5) but remains low compared to other regional BTS' budget (average of \$1.2M).
- ✓ Good management with the following aspects: well-trained and competent professional at each level of system, especially for the right staff-team with almost

the right person for the right job – External audit of quality system which has the job descriptions and person specifications set out precisely what a job involves and the kind of person needed – Staff management includes the delegation.

**3) Consequences of good leadership and management are noted by the following areas:**

- The total number of blood donation has significantly increased, from 10 092 in 2005 to 35 852 whereas the number of blood units considered safe increased from 8 438 to 34 904, nearly multiplied by 4. At the same time, the percentage of unpaid blood donation reached 100% whereas paid and family donors fell to 0%
- All blood units were screened according to WHO standards, meaning for all blood transmissible agents (HIV, HBV, HCV and Syphilis). However, various components (Plasma, Red Blood Cell, Platelets) of the blood are not separated
- In the meantime, the total number of blood units re-tested (HIV+ and HIV-) with “correct” results fall from 2.83% to 0.68%. Although the estimate of the residual risk of transfusion-transmitted HIV - Incidence rates and RR of transfusion-transmitted HIV infection remains high (1/25.000 versus 1/2.500.000 in France), which is close to the rate of the regional African countries (1/28 571 in Senegal) (6).
- The percentage of unsatisfied demands from paediatrics and obstetrical services has slightly decreased from 12% to 10%.

**4) In summary:** The system recorded some significant progresses with the funding support from the French Agency for International Development. However, the insufficient level of financing from the national government constitutes an important limitation for further improvements.

**IV – General comments on Blood safety**

**The costs of unsafe blood:** Blood is a national resource and therefore, it's the government responsibility to ensure that the blood supply is safe, adequate to meet the needs of patient populations and available to all who require it (3). It is also the responsibility of governments to ensure that all clinicians are trained to prescribe blood and blood products only when clinically necessary. This cannot be achieved without cost. However, unsafe or inadequate blood supply is ultimately even more costly in both human and economic terms. The human costs of unsafe blood are incalculable morbidity and mortality resulting from the transfusion of infected blood. This has far-reaching consequences, not only for the recipients themselves, but also their families, their communities and the wider society (2, 7). Since a person can transmit the infection during the asymptomatic phase, it can contribute to an ever-widening pool of infection in the

wider population (8). The economic costs of a failure to control the transmission of infection have already been graphically demonstrated in countries with a high incidence and prevalence of HIV and AIDS increased requirements for medical care, higher levels of dependency and the loss of productive labour place heavy burdens on overstretched health and social services and on the national economy (9). Moreover, the route of transmission via blood transfusion is almost 100% effective in transmitting HIV and other infectious agents. The incidence of transfusion-transmitted infection and its associated costs will almost certainly increase in countries that do not take stringent measures to ensure the safety of their blood supplies. An investment in safe and adequate supplies of blood is a cost-effective investment in the health and economic wealth of every nation (9).

## **B- Vaccine & Immunization System (table II)**

### **I – Background of vaccines and immunization in developing countries**

More than 23 million children in developing countries do not receive life-saving vaccines (10). Every 20 seconds a child dies from a vaccine-preventable disease; he or she will most likely be in a developing country (10). Current estimates: 7.6 M child deaths <5years of age. Africa, which is home for about 20% of the world's children accounts for approximately 50% of global child deaths and about 30-40% of deaths in children 1-59 months of age are vaccine preventable (11). It's unlikely that Africa will meet the MDG4 target of reducing child mortality by 2/3 by 2015 (12).

However, many children are denied these benefits and many are dying as a consequence and are being disabled as a consequence. Many effective vaccines are not available in Africa or are available but underutilized. Nearly 1/3 of African infants do not receive their third dose of the diphtheria-tetanus-pertussis (DPT) vaccine (13). In order to improve immunization in the World, in May 2011 the 64<sup>th</sup> General Assembly recommend to WHO's to draw an action plan (2011-2020) (14). The Strategic Advisor Group of Experts (SAGE) has published a document of decade of vaccines with an action plan. The Global Vaccine Action Plan (endorsed by the 194 Member States of the World Health Assembly in May 2012)

There are still several bottlenecks to reach universal immunization in sub-Sahara African countries, including Congo-Brazzaville and Togo. Beyond the socio-political aspects, community problems, HIV epidemic, anti-vaccination lobby and vaccine shortages, main problems are around economic factors, vaccine costs and funding, health service issues including governance, leadership and good management of health system and primary care services delivery.

## **II - Congo-Brazzaville**

**1) Background and context of Vaccines and Immunization in Congo-Brazzaville:** The Expanded Program on Immunization (EPI), a major component of the fight against disease, was established in 1981, following the adoption of a health policy by Congo in 1979 giving priority to preventive medicine and to primary health care (15). The objective was to ensure the universal immunization of children and reduction in the incidence of target diseases by the EPI. From 1986, with the national vaccination campaign, the EPI experienced a significant improvement in immunization coverage, it has achieved the objective of "universal immunization in children" (80% in DTP3) and the reduction of target diseases. These achievements have been maintained from 1988 to 1996, during which partners have reduced their contributions, without relay from domestic financial resources. This withdrawal has coincided with the political unrest of late 1990's which have led to destruction of health infrastructure and of course a decline in immunization coverage. Since peace has returned the multi-year plan for 2004-2008 implementations, the EPI Congo has made enormous progress. The implementation of the approach of "reach every district" (RED) has been the strategy which has supported this increase. The strengthening of RED strategy has always occupied a special place in the multi-year plans developed by the program including this one (CMYP 2011-2015) (16).

**2) Program Management:** Since 2000 there have been steady improvements in coverage rates. Congo's EPI is performing rather well (17). The country has increased DTP3 coverage from 31% in 2001 to 90% in 2010 under GAVI support. WHO/UNICEF and Country's estimates have matched since the last ten years (18).

- ✓ The EPI review conducted in 2010 found deficiencies with immunisation data and suggested that the DTP3 coverage should be revised from 90% to 81% for 2010, with a target to improve coverage to 86% in 2011.
- ✓ The achievements are satisfactory as coverage targets were met for most antigens, particularly MCV and DTP-HepB-Hib
- ✓ The downside of these highly focused and concentrated and frequent supplemental efforts were fatigue on the part of the local populations and health workers as a result of organizing numerous immunization campaigns, the additional workload for the teams involved, and the consumption of a large portion of the budget reserved for routine EPI.
- ✓ Several activities were conducted to improve the administrative data management system: 1 – DQS conducted in 2009 - 2 – Quarterly meetings at the national and health district levels to review and standardize data - 3 – Supportive supervision at every level - 4 – Gradual implementation of a national Health Information System (HIS) - 5 – Data collection tools updated and made available at every level.

✓ These efforts seem to have yielded fruits, as the coverage increased to 90% (JRF and WHO/UNICEF estimates).

✓ The Republic of Congo vaccinated 144,266 children with DTP3 in 2011 (Fig.2), representing 14,696 additional infants over the 2010 figure of 129,570. These results were obtained thanks to stepped-up immunisation activities and catch-up campaigns during Mother and Child Health Week. The availability of vaccines throughout the year and the fact that health districts were well stocked also contributed to achieving these results. The country noted the following obstacles in 2011:

- Fatigue on the part of local populations and health workers as a result of organizing numerous immunisation campaigns (e.g. 7 especially for polio NIDs, measles outbreak response). The numerous supplementary immunisation activities were an additional constraint because they added to the teams' work load and consumed a large portion of the budget reserved for routine EPI.

### **3) Routine - New and under-utilized Vaccines**

**i) Stockouts:** There were gaps for Pentavalent (DTP-HepB-Hib) and the Yellow Fever. Measures were taken to better manage the situation and ovoid stock:

- Orders are better planned - Supply Monitoring Tool (SMT) and DVD-MT are used to better manage vaccines - Supportive supervision.

**ii) Vaccine Management (Effective Vaccine Management):** An assessment of Cold Chain capacity was carried out on Dec 2010. The next EVSM is due in 2013.

**iii) Coverage levels:** These, as well as the target levels, have been adjusted on the basis of the Survey data, and on the expectations of actual vaccine deliveries.

- BCG: 95% - MCV: 90% - Pentavalent (DTP3-HepB-Hib): 90% (8% wastage rate) - Yellow fever: 90% (17% wastage rate) - TT: 83% - PCV13: Planned to be introduced in the second half of July 2012.

**iv) Wastage:** In 2011, the targets in the cMYP for yellow fever vaccine wastage were maintained and these were different from the targets in the 2010. Consequently, the cMYP targets were used: 20% for 2014 and 20% for 2015.

In general, the country had concern for the strain on its resources for the implementation of routine immunisation because of the repeated catch-up campaigns. There was clear recognition of the importance of moving away from crisis management to the routine approach of an effective and efficient immunisation system. It is anticipated that during the 2012 "Year of Health in the Congo," the EPI will be positioned as the driving force behind the revitalization of the healthcare in districts which Congo has chosen to focus on.

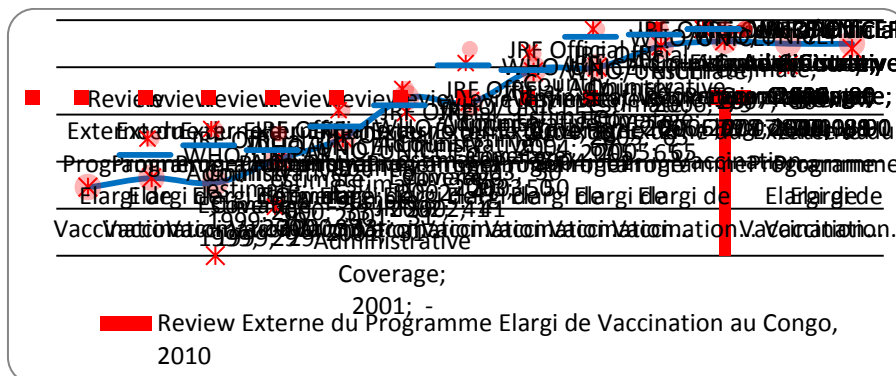
### **4) Vaccine Co-financing and Financial Sustainability and Financial Management:**

- ✓ According to GAVI's policy, Congo is a graduating country. That means due to the level of GDP, the country is no more eligible for the GAVI's support. It started a mandatory co-financing of pentavalent vaccine in 2008 and yellow fever vaccine in 2009. In 2011 the government spent the following amounts in co-financing: \$53,000 (16,900 doses) for pentavalent vaccine, \$16,500 (13,600 doses) for yellow fever vaccine, and \$13,600 for pentavalent-related vaccine injection supplies.
- ✓ The majority of the 2011 Program budget was used for supplemental immunization activities for poliomyelitis measles and for catch-up activities because of the immunization dropouts during mother and child health week.
- ✓ An initiative has been launched by Sabin-Institute/GAVI/WHO/UNICEF to lobby the government to increase, secure, and clarify EPI budget headings, taking into account GAVI policies. A transition plan for GAVI withdrawal and subsequent hand-over to the Government has been developed. The development of sustainable funding strategies and the subsequent updating of the cMYP are planned.

**5) In summary:** The country shows significant strides to improve its immunisation record. However, there are still some challenges to overcome. Most of the problems are linked to bad organization by EPI system, which reflects weakness of its leadership and management.

- It recognizes the need to move away from a crisis management approach of delivering immunisation to one where there is an effective system in place for routine immunisation delivery.
- It has identified some of the strategies planned to address some of these issues.
- Challenges with Polio cases: Congo experienced polio outbreak in early 2011 with more than 200 deaths in teenagers.
- Congo experienced a resurgence of measles in 2011.

During the 2012 “Year of Health in the Congo,” the EPI was positioned as the driving force behind the revitalization of the healthcare in the districts of Congo chosen as focus for year 2012



**Figure 2: DTP3 coverage in Congo-Brazzaville**

### III - Togo

**1) Context of Vaccines and Immunization in Togo:** The National Expanded Vaccine Programme (EPI) was implemented since 1980 by the Togolese government (20). Its mission was to contribute to the reduction of the morbidity and the mortality of the avoidable diseases by vaccines, especially for children and women. This program is one of the National Public Health components. After a decade of good performance, the EPI faced some difficulties from 1990 following the socio-political crisis and the withdrawal and the disengagement of the partners. In this context, there was a collapse in the vaccines coverage around 2001 (20). Since 2002, based on every district approach implemented in the 35 districts, coupled with both financial and technical supports from various funding agencies (e.g.: GAVI, WHO, UNICEF, European Union, French Cooperation, GTZ), the EPI has improved its performance level. In the meantime, the government has also committed to EPI's activities as shown by a specific line in the country national budget devoted to the purchase of routine vaccines and consumables. Based on above support, the EPI achieve good results and is improving its performance. Nonetheless, the program is still facing some challenges, mainly around the financial resources for its sustainability. Therefore, the EPI has initiated actions in fund raising to enable the implementation of the Country Comprehensive Multi-Year Immunization Plan, cMYP 2012-2015 (21).

**2) Program Management:** There was no discrepancy between administrative data and WHO/UNICEF estimates of DTP coverage for the period 2002 – 2011 (22).

- ✓ The country had thus no opportunity to act upon the new UNICEF/WHO estimates, which retro-fitted the “blue line”, in their estimates/target setting.
- ✓ Current estimates show that DTP3 coverage in Togo has been stagnant at 80% coverage since 2005 (Fig.3).
- ✓ Immunisation results from service data indicated a moderate increase in children vaccinated in 2011, but Togo did not reach their target set for 2011.
- ✓ Togo has planned an immunisation coverage survey for 2012 as part of the planned external review of the EPI.
- ✓ There is also a DHS planned in 2013, with field work during the period of January 2013 - April 2013. These surveys will confirm Togo's coverage. Awaiting this, other efforts are made to assure data quality: monthly meetings are held to monitor EPI/IDSR data at the national, regional and district levels.
- ✓ Togo had a population census in 2010 and has updated the projected births, which now differ slightly from the previous projections sent to GAVI.

### 3) New and under-utilized Vaccines



**i) Stock-outs:** Except for the BCG syringe (from July to December at the national level and from September to December at the local level), there was not stock-out for vaccines.

**ii) Effective Vaccine Management:** An effective Vaccine Management was carried out on April 2011 (23).

**iii) Coverage levels:** BCG: 90% - MCV: 67% - Pentavalent (DTP3-HepB-Hib): 81% (1% wastage rate) - No major procurement or shipment issues are raised - No challenges on vaccine management, overstock/under stock - Yellow fever: 85% (16% wastage rate) - No major procurement or shipment issues are raised; - No challenges on vaccine management, overstock/under stock - TT: 81%.

**iv) Wastage:** Pentavalent (1%) – Y.F (16%)

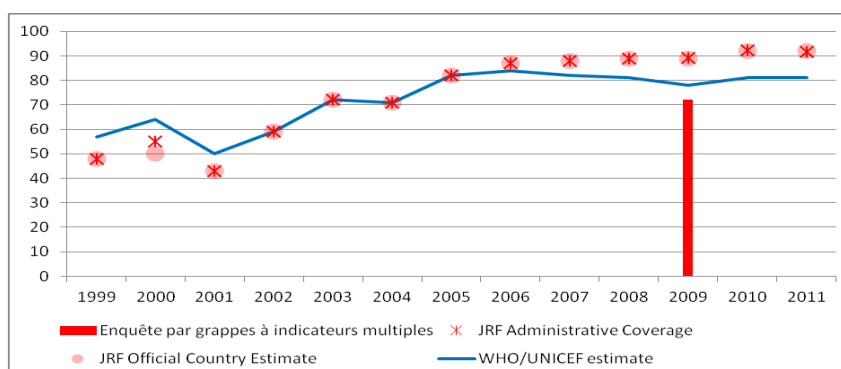
#### **4) Vaccine Co-financing, Financial Sustainability and Management**

- ✓ Togo falls into the low income countries category and seems to be performing well, living up to its co-financing requirements (\$166,000 in 2011).
- ✓ The Government of Togo is committed to the following amounts of co-financing for new vaccines. As of now, it is uncertain if the government will be able to fulfil these commitments. The projected expenditures for 2011 (\$11,158,000 in the cMYP) were greater than actual expenditures in 2011 for routine activities (\$6,192,391). The GAVI alliance is the major funder in Togo (24).

**5) In summary:** The country has performed well for co-financing with functioning ICC/HSCC committees. The ICC meets regularly and appears to be active in providing program guidance. However, in spite of undeniable assets in terms of governance and coordinated management, the limitation of financial resources from the government and the dependence of external support mainly from GAVI) are causes for concern on the solidity and sustainability of the National EPI system.

- ✓ Coverage is above 80% in all the 35 districts but was under country projections and a gap of +11 points is noticed between the country official coverage estimate and the WHO/UNICEF.
- ✓ Togo has successfully introduced new vaccines (YF 2005 and Penta in 2008) and has been able to keep coverage at a steady level (around 80%).
- ✓ There is a reasonable functional vaccine management system in place.
- ✓ The country seems well aware of the importance of data for program management and has made several improvements for its data quality for the ongoing activities.
- ✓ An external EPI review was carried out in 2012.

Togo is facing challenges for resource mobilisation; the 2011 budget was only secured up to 50% and the country has reported that it will likely be short of funding in 2012 because of fundraising difficulties



**Figure 3: DTP3 coverage in Togo**

#### **IV – General comments on vaccines and immunisation system**

Immunization is the most cost effective public health discovery (10). In other words, Vaccines are one of the most successful and cost-effective health investments in history (10). Investing in vaccines saves more money than it costs. Immunization has reduced childhood morbidity and mortality dramatically. By helping healthy people stay healthy, vaccines remove a major barrier to human development. Immunised children have higher cognitive abilities and are more likely to attend school and go on to be productive members of their community. By reducing illness and long-term disability, vaccines also generate savings for health systems and families (13). Health workers are freed up and parents spend less time looking after sick children.

In order to improve immunization in the World, in May 2011 the 64<sup>th</sup> General Assembly recommend to WHO's to draw an action plan (14). The Strategic Advisor Group of Experts (SAGE) has published a document of decade of vaccines with an action plan. The Global Vaccine Action Plan has outlined a set of ambitious goals and strategic objectives for the decade to broaden the impact and reach of immunization across the globe (14);

There still are several bottlenecks to reach universal immunization in sub-Sahara African countries, including Congo-Brazzaville and Togo. Beyond the socio-political aspects, community problems, HIV epidemic, anti-vaccination lobby and vaccine shortages, main problems are around economic factors, vaccine costs and funding, health service issue.

#### **C - HIV/AIDS**

##### **I – Background and brief introduction about HIV/AIDS**

**1) Epidemiology:** At the end of 2005, there were about 38.6 M people worldwide infected by HIV (24.5 M or 2/3 living in sub-Saharan African countries) with 2.8 M death due to

AIDS in 2005 (2 M in Sub-Saharan Africa) – 4.1 M new infection in 2005 (2.7 M in Sub-Saharan Africa) – Adults prevalence of average of 7.2% in Sub-Saharan Africa (25).

**2) Origin and justification of “Three ones”:** In April 2004, the Consultation on Harmonization of International AIDS Funding bringing together representatives from governments, donors, international organizations and civil society endorsed the “Three Ones” principles as follows (26):

- One agreed AIDS action framework that provides the basis for coordinating the work of all partners - One national AIDS coordinating authority, with a broad-based multisectoral mandate - One agreed country-level monitoring and evaluation system.

**3) National AIDS Councils:** National AIDS Councils (NACs) were established in many African countries with main mandate to (27):

- ✓ Provide strategic leadership to fight against HIV/AIDS - co-ordinate the multisectoral response to fight against HIV/ AIDS, recognized in law with broad-based multisectoral support and full technical capacity for coordination - ensure monitoring and evaluation - ensure resource mobilization and financial tracking - provide strategic information management.

In this study on Congo-Brazzaville and Togo, we try to understand the extent to which NACs have achieved their goals and if there were some benefits provided to their health systems.

## **II - Congo-Brazzaville** (table III)

**1) Context of HIV/AIDS in Congo:** HIV/AIDS was first diagnosed in Congo in 1983 and by the end of 1996 it had become a major cause of death among adults aged 15 to 45 (35% of all deaths in this age group, with a total of 10,777 AIDS cases reported) (25). The successive conflicts reduced the sentinel surveillance system, but a limited survey conducted by the Ministry of Health (MoH) in 2000 showed that 14.6% of pregnant women were infected with HIV in Pointe- Noire and 5.4% in Brazzaville. Between 2003 and 2005, UNAIDS estimated that 110,000 people were living with HIV and that the national seroprevalence rate was 7.2% (25, 28).

In order to better coordinate HIV/AIDS activities and according to UNAIDS and International policies, the country created a National AIDS Committee with its Permanent Executive Secretariat (SEP/CNLS) in 2004. With technical assistance (World Bank, MAP), the SEP/CNLS developed a Strategic Framework for HIV/AIDS Control for the period 2003-2007. In 2004, \$19 million grant to enable the country to implement the strategic framework through the HIV/AIDS Control and Health Project was allocated by the World Bank (29). In 2009, a new strategic framework for the period 2009-2013 was developed to

consolidate the experiences acquired during implementation of the 2003-2007 framework, and its execution benefited from an additional financing of \$15 M for the period 2009-2012, of which \$5M was provided by the Bank and \$10M by the Government.

**2) Governance, Management and Coordination Capacities:** Up to 2005, there were nearly no governance, management and coordination for HIV/AIDS pandemic in Congo-Brazzaville. With the funding support mentioned above, the SEP/CNLS has benefited from capacity-building in human resources and equipment to successfully implement project. Fiduciary Management is now carried out by the SEP/CNLS management unit at the central and decentralized level which benefited from the transfer of expertise from the KPMG Consultancy. To improve supervision of activities, a monitoring and evaluation plan, data collection and reporting tools have been implemented (DHS, sentinel surveys, behavioural studies, etc.) and made it possible to assess the results of overall HIV/AIDS activities.

**i) Strategic Leadership:** Partially assumed by the Permanent Executive Secretariat of National AIDS Councils.

**ii) Support for programme implementation:** Most of the skills and other capacities susceptible to facilitate the setting-up of the activities related to the program have only been partially organized. Some of them are listed below:

✓ Capacity building for implementation - mainstreaming of public sector programs - essential commodities - HIV service delivery - community based HIV programs.

**iii) Governance and Strategic Information:** Like above, only partial capacities have been implemented, which include the following: Collection of data which allow generating useful information that will facilitate adapting strategic decision and policies - information plan - accountability and verification.

**iv) Management system:** Like above, capacities only partially implemented - Performance management system - evidence-based management - results oriented system (appropriate tools) - strategic planning system.

**3) Mobilization of resources:** The governance, management and coordination capacities to mobilize resource in order to implement the National Plan have been partially improved. The government allocation seems to be substantial, although it's still far to support overall activities of the National Plan and ensure the sustainability of positive outcomes gained during the last five years.

1. Capacity of resources (financial and human) mobilisation – 2. Number of coordination meetings held each year 3. Budget for NAC: Government and International funding agency.

#### **4) Coordination of stakeholders:** Partially achieved

i) Leadership in coordinating all stakeholders involved on HIV (national, NGO, United Nation partners and other funding agencies).

- ✓ Framework for periodic exchange with specific channels to share strategic information (keys stakeholders) - Number of sectors which implement more than 80% of the agreed Action Plan - Number of health facilities providing quality treatment for STI in the regions.

**5) Monitoring of selected activities:** As stated below, collected data globally show some progress even though there are domains to be improved.

1. Number of regional HIV/AIDS committees (UDLS) reporting annually on at least 75% of M&E indicators (12 in 2011 versus 11 in 2005 – target 12) – 2. Percentage of population reached through HIV/AIDS IEC/BCC radio/TV programs (94% in 2011 vs 53.9% in 2005 – target 90%) – 3. Percentage of schools teaching HIV/AIDS modules in national curriculum (e.g.: primary schools 33.4% in 2011 vs 0% in 2005 – target 60%) – 4. Number of people living with HIV (83 000 in 2011 vs 110 000 in 2005 – 5. Percentage of adults infected with HIV (3.5% in 2011 vs 4.5% in 2005) – 6. Annual number of new infections (7 900 in 2011 vs 13 500 in 2005) – 7. Annual number of deaths attributable to HIV (adult) (4 600 in 2011 vs 10 777 in 2005) – 8. Percentage of pregnant women attending prenatal consultations accepting voluntary testing for HIV (76.8% in 2011 vs 16% in 2005 – target 90%) – 9. HIV prevalence among 15-24 year old pregnant women (2% in 2011 vs 2.6% in 2005 – target 2%) – 10. Percentage of HIV-positive pregnant women who receive antiretroviral medicines to reduce the risk of mother-to-child transmission (MTCT) (60.6% in 2011 vs 40.7% in 2005 – target 80%) – 11. Percentage of pregnant women testing positive who benefit from the global care, support and treatment (68.7% in 2011 vs ND in 2005 – target 80%) – 12. Number of infants born HIV positive and treated according to national protocols (1320 in 2011 vs 632 in 2005 – target 1485) – 13. Prevalence of STI among pregnant women (8.2% in 2011 vs 3% in 2005 – target 2%) – 14. Number of PLWHA benefiting from ARV treatment (21940 in 2011 versus 11577 in 2005 – target 15000) – 15. Percentage of ART coverage (44% in 2011 vs 15 in 2005 – target 70%) – 16. Orphans due to AIDS aged 0 to 17 (51 000 in 2011 vs 10 317 in 2005 – target 30 000) – 17. Number of orphans and vulnerable children (OVC) receiving a package of services (11 764 in 2011 vs 2000 in 2005 – target 30 000) – 18. Number of health facilities providing quality HIV counseling and testing (144 in 2011 vs 59 in 2005 – target 99) – 19. Number of health facilities providing quality HIV/AIDS care and treatment (65 in 2011 vs 32 in 2005 – target 40).

**6) In summary:** The control of HIV/AIDS and STDs has been made mainly with the support of funding from the World Bank, as well as significant financial contribution from the National government. This has helped to establish the basis of the national response to the fight against HIV/AIDS. Many interventions regarding prevention and treatment, for orphans and other vulnerable children, their management, follow-up, and assessment have been carried out and have made possible a number of results and experiences. However, some difficulties related to the government funding and insufficient qualified human resources for leadership, management, as well as for the implementation of the activities still remain major challenges for day-to-day operations. It has some consequences in terms of the overall quality of the supplied services, but also on the sustainability of the good results recorded during the past years. The reinforcement of the governance, leadership and management capacities at the National AIDS Council level will enable it to better mobilise various stakeholders, increase the interest of population as well as political commitment for the fight against HIV/AIDS in Congo-Brazzaville.

### **III – Togo (table III)**

**1) Context of HIV/AIDS in Togo:** HIV/AIDS was first diagnosed in Togo in 1987. The HIV epidemic is of generalized type. The evolution of the epidemic had 2 phases: a phase of increase which goes until 2004 and a phase of stabilization which starts from 2005. By the end of 2005, a total of 18 000 AIDS cases were reported and the UNAIDS estimated that 137 270 people were living with HIV, with the national seroprevalence rate of 4.5% (30). This general profile shows a high range of disparity, particularly in the marmite region where sero-prevalence rates reached 7% (44.5% in commercial sex workers and 13.5% for their partners) whereas it was around 3% in rural areas. Amongst infected persons, young people (15-24 years old) were the most infected and pregnant women (4.8%).

In response to the growing problem, the National AIDS Program (PNLS) was established within the Ministry of Health; the National AIDS Committee was established in 1988 to make policy (1987 - 1995). Since 1999, there have been several processes of reinforcement of the institutional framework. In this context, the government has created a National AIDS Councils in 2001 (31).

**2) Governance, Management and Coordination:** Although the global action of the NAC is seen by all actors on the ground as an important stake, this coordinator organ is far from achieving its conferred role. In fact, there is insufficient or lack in most of following areas:

**i) Strategic Leadership:** No leadership in charge with the coordination with various partners. There is a weakness in political commitment and leadership. All

of state institutions (e.g. national assembly - senate) are not mobilized to send a strong signal without ambiguity toward targets which might be helpful for mobilizing internal and external funding and financial supports.

- ✓ No vision and clear objectives of NAC with regard to the pandemic in the country and in the sub-region - No plan for training NAC staff.

**ii) Support for programme implementation:** Activities listed below were carried out in a disorganized manner without coordination and supervision with, sometimes, some risks of not reaching good results :

- ✓ Capacity of Implementing - Mainstreaming Public Sector Programs - Essential Commodities - Health Sector HIV Service Delivery - Community based HIV Programs

**iii) Governance and Strategic Information:** No communication plan. No adequate system of circulation and distribution of the information with the partners. The following were carried out in non-professional way:

- ✓ Collecting data to generate useful information adapt strategic decision and policies - Information Plan - Accountability and Verification

**iv) Management system:** There is insufficiency in planning, management and coordination of most of the activities related to the fight against HIV/AIDS, especially at regional level. As a consequence, the reliability of the data is a concern and the information products to adjust policies are based on false basis. The appreciation or the evaluation of the real needs a real challenge. Once again, the same remark made earlier, the following activities were conducted with risk of failure.

- ✓ Performance management system - Evidence-based management - Results oriented system (appropriate tools) - Strategic planning system.

**3) Mobilization of resources:** There is not commitment of NAC in the resource mobilisation and no internal or external funding. In spite of existence of strategic document for internal resource mobilisation, it's never been operational.

1. Capacity of resources (financial and human) mobilisation –
2. Number of coordination meetings held each year –
3. Budget for NAC: government and international funding agency;

**4) Coordination for stakeholders:** this duty is not performed as it should. For example, in the private sector, the coordinator committee established is still waiting for the Presidential decree to be functional.

- i) Leadership to coordinate all the stakeholders involved on HIV (national, NGO, United Nation partners and other funding agencies).

- ✓ Framework for periodic exchange with specific channels to share strategic information (keys stakeholders). No formal frame of publication of annual activities.
- ✓ Number of sectors that implement more than 80% of the agreed Action Plan
- ✓ Number of health facilities providing quality treatment of STI in the regions.

**5) Monitoring of selected activities:** As mentioned below, the data and the margin of progress is important. In other words, the overall performance is weak.

1. Number of regional HIV/AIDS committees (UDLS) reporting annually on at least 75% of M&E indicators (15 in 2011 versus 10 in 2005 – target 20) – 2. Percentage of population reached through HIV/AIDS-IEC/BCC radio/TV programs (71.5% in 2011 vs 47% in 2005 – target 90%) – 3. Number of schools teaching HIV/AIDS modules in national curricula (e.g.: primary schools 343 in 2011 vs 493 in 2005) – 4. Number of PLHIV (150 000 in 2011 vs 140 000 in 2005) – 5. Percentage of adults infected with HIV (3.4% in 2011 vs 3.5% in 2005) – 6. Annual number of new infections (adults and children) (9 500 in 2011 vs 14 000 in 2005) – 7. Annual number of deaths attributable to HIV (adult) (8 900 in 2011 vs 11 000 in 2005) – 8. Percentage of pregnant women attending prenatal consultations accepting voluntary testing for HIV (61.7% in 2011 vs 57.2% in 2005 – target 90%) – 9. HIV prevalence among 15-24 year old pregnant women (2.7% in 2011 vs 3.3% in 2005) – 10. Percentage of HIV-positive pregnant women who receive antiretroviral medicines to reduce the risk of mother-to-child transmission (MTCT) (60.7% in 2011 vs 32.8% in 2005 – target 95%) – 11. Percentage of pregnant women testing positive who benefit from the global care, support and treatment strategy (48% in 2011 vs ND in 2005 – target 80%) – 12. Number of infants born HIV positive and treated according to national protocols (3270 in 2011 - ND in 2005) – 13. Prevalence of STI among pregnant women (1.2% in 2011 vs 2.5% in 2005) – 14. Number of PLWHA benefiting from ARV treatment (29 045 in 2011 vs 3 972 in 2005 – target 55 000) – 15. Percentage of ART coverage (42% in 2011 vs 14 in 2005 – target 80%) – 16. Orphans due to AIDS aged 0 to 17 (89 000 in 2011 vs 71 000 in 2005 – target 55 000) – 17. Number of orphans and vulnerable children (OVC) receiving a package of services (9 500 in 2011 vs ND in 2005) – 18. Number of health facilities providing quality HIV counselling and testing (233 in 2011 ND in 2005) – 19. Number of health facilities providing quality HIV/AIDS care and treatment (141 in 2011 - ND in 2005).



**6) In summary:** The lack of accountability in governance, good leadership and efficient management are somewhat related to the human resources capacities. The incapacity of managing strategic information leads to the impossibility of generating informed and relevant decisions from political decision-makers. These decisions have influence on the increased of interest as well as financial level from National (government and private sector) and external donors, more compatible with the NAC's mission.

There are no tools of management and piloting of the NAC. As a consequence, it could not achieve its objectives.

As the advocacy and resource mobilization are amongst the essential missions of the NAC, for most of national stakeholders as well as United Nation agencies, it raises the question of the utility of this organ.

There is a strong dependence from outside support in terms of financial resource allocated to fight against HIV/AIDS. In fact, international funding agencies (e.g. Global Fund) provided around 80% of the budget for the 5-years multisectorial plan. Therefore, the sustainability of good results is not certain and most of outcomes are fragile and not acquired for long-term.

#### **IV – General comments on National Council against HIV/AIDS**

The formation of NACs in the early eighties was an acknowledgement that HIV/AIDS was a huge challenge, with significant implications for the socio-economic development in many developing countries (32). The expected roles of NACs are well defined but the councils in different countries have had different experiences, with some achieving significant impact in successfully co-ordinating the pandemic and others having mixed experiences (33).

The Senegalese and Ugandan experiences are African success stories in reversing the course of AIDS disease, which is partly attributed to a highly co-ordinated multisectorial response by civil society, private sector and government, and political leadership (27). Uganda is the first country in Africa that had fund and a body structure that was responsible for co-ordinating and controlling HIV and AIDS activities. The other factors noted in Ugandan's success are political leadership coupled with increased donor funding and improved programming of HIV prevention activities. South Africa's National AIDS Commission (SANAC) has demonstrated its ability to co-ordinate multisectorial efforts in the production of the National Strategic Plan for HIV and AIDS and STI (2007 - 2011) through strong political leadership (35). However, like many African countries that are considered unsuccessful in mounting meaningful mitigation response to HIV and AIDS pandemic (27, 32, 36), Congo-BZV and Togo still face numerous issues, ranging from lack of political will, weak institutions and capacity of the state, lack of co-ordination to different levels of government, and many others.

In order for NACs to be effective in leading the national multi-sector response to HIV/AIDS in these two countries, their respective governments as well as international donors should significantly increase financing for AIDS by strengthening and fulfilling existing commitments, fully supported by the Global Fund and supporting other innovative financing mechanisms.

For the link between NAC and stakeholders, there is consensus that NACs work within a multisectorial partnership with other stakeholders. The NACs recognised the health sector as a technical partner, since the NAC's expertise lay in the co-ordination and management of the HIV/AIDS response. However, in Togo most of CSO perceived the link of the NAC with a MOH as a risk in terms of multisectorial coordination.

Another key challenge identified by for both NACs is the shortage of skilled workers, which inevitably leads to poor surveillance, planning and administration. This is a bottleneck in the distribution of funds, failures in the implementation, monitoring and evaluation of activities, as well as inadequate provision of services. In addition, there is high turnover of staff at the NACs due to poor remuneration packages. Obviously, if key staffs keep changing in an organisation, this shall automatically generate weaken the performance and create lack of continuity.

Furthermore, some workers into both NACs have shared that work at NAC offices is overwhelming. Understaffing, shortage of skilled workers and lack of office space are other day-to-day challenges.

Other accompanying challenges are problems of implementation, capacity and good governance at grassroots level. In both countries, there is weakness capacity to assess proposals or to deal with the heavy workload. As a result of this, there are different levels of implementation, depending on how efficient and effective their Regional Facilitating Agencies are. It has been noted that there are sectors (ministry) which are not doing much in terms of implementation of HIV/AIDS programs.

Clearly, in both countries, despite the limitation in terms of general performance, the multisectorial and coordinated response against HIV/AIDS remain critical as it was in the 1980s when the majority of NACs were established. Nonetheless, there is a need for in-depth changes in its structuring and organization with well-trained task-team heading the NACs. This task-team leading the NAC should be composed by the qualified personnel, possessing skills in leadership, good governance, logistics, programming and monitoring and evaluation. Furthermore, the team must be equipped with tools suited for the follow-up, the management, coordination and facilitation of activities according to the priorities and targets validated within the framework of 5-years strategic plan against HIV/AIDS. It also should be involved in multisectorial coordination with stakeholders and partners.

## **D - Health system (table IV)**

### **I – Brief introduction of health system in developing countries**

**1) Health System :** According to the WHO's definition, health system is composed of all the organizations, institutions, resources and people whose primary goal is to promote, deliver, restore, or maintain the health of a population (fig.4). A health system could be seen as including all actors, institutions and resources that undertake health actions (actions intended to improve population health with the goal to be responsive to the served population and to fairly distribute the financial burden across population) and is carrying out different tasks: service provision, resource generation, financing and stewardship (figure 5). However, a health system can also be seen in a more restrictive way as a healthcare providers system. Therefore, the scope of performance indicators is enormous, ranging from examining the state of a nation's health system to reflecting on the experiences of the individual patients (figure 6) (37).

In most developing countries, health system is still matter. This is particularly obvious in the countries of sub-Saharan Africa where most of health system is collapsed (38). The improvements of health system performance have become a key policy issue in developing countries (39). After substantial financial injection to strengthen health system in these countries without significant results, there has been a growing movement to link international development finance to the achievement of measurable goals and many initiatives to measure system performance are being put in place (40).

**2) Health System Performance in Sub-Saharan African countries:** Countries and international organizations have renewed their interest in how health systems perform, which means the measurement evaluates the extent to which the health system meets its key objectives. This has led to the development of performance indicators for monitoring, assessing, and managing health systems to achieve effectiveness, equity, efficiency and quality. However progress in the development of data collection techniques in the different dimensions of health performance is variable. The indicators for the measurement of health system performance are often organized into three categories: effectiveness, equity, and efficiency (figure 7). Measures of health system effectiveness are improvement in health status, access to and quality of care and increase in patient satisfaction. Measures of equity include access and quality of care for disadvantaged groups together with fair financing, risk protection and accountability. Measures of efficiency are appropriate for levels of funding, the cost-effectiveness of interventions, and effective administration.

In our study, in order to measure the support of health system by various health programs, we've measured some indicators related to the effectiveness (health status) and efficiency (cost-effectiveness of interventions, and effective administration). Aspects related to the equity have not been integrated in this analysis. At the same time, we're well aware that employment of performance indicators requires a careful consideration of different approaches with complimentary effects in order to assess whether health system achieves outlined objectives.

**3) Differentiation between support and strengthening health system.** Interpretation of health system strengthening (HSS) has varied widely with much of the focus today on alleviating input constraints, whereas less attention has been given to other performance drivers. It is important to distinguish activities that support the health system, from the ones that strengthen it (41). Supporting the health system can include any activity that improves services, from collecting blood sample, vaccine delivery and distributing vitamin supplements to children to procuring medicines (ARVs in HIV/AIDS). These activities improve outcomes primarily by increasing inputs. Strengthening the health system is accomplished by more comprehensive changes to performance drivers such as policies and regulations, organizational structures, and relationships across the health system to motivate changes in behaviour and/or allow more effective use of resources to improve multiple health services. Even organizations that have made significant investments in health systems have not provided guidance on what HSS entails. While both supporting and strengthening are important and necessary, it is nonetheless important to make a distinction. If activities fail to produce improvements in system performance because they were incorrectly labelled as system strengthening, the value of HSS investments could quickly be discredited. Not distinguishing supportive activities from strengthening ones will lead to unmet expectations of stronger health systems, as well as neglect of critical system strengthening activities. Distinguishing between these two types of activities will improve impact on programming (41).

## **II - Congo-Brazzaville**

**Context and background of the health system** (42): The health situation in Congo is characterized by the precarious health status of populations and against performance-health services. The health system is low performing due to:

- Bad governance and leadership and inadequate management of HS - Insufficiency of quantitative and qualitative human resources - Insufficient of financial resources (health expenditure per capita: \$72 with GNI per capita of \$ 2.943) associated with inadequate mode of distribution - Lack of appropriate equipment - Ineffectiveness of

the system of supply coupled with little rational use of medicine - Bad distribution of sanitary trainings on the territory.

Most of key sanitary indicators confirm the low performance of health systems (43, 44):

- Life expectancy is around 55 years (against 59 Y average rate for sub-Saharan Africa) - Adult mortality rate is 385 per 100 000 - Rate of mortality for children under five is still high (128 per 100 000, MDG n°4) - Maternal mortality ration 780 (modelled estimate, per 100,000 live births) - Incidence of tuberculosis is 387 (per 100 000 people) – Total prevalence of HIV is 3.5% for population ages 15-49.

In summary, the health system is still inefficient due to multiple factors, including poor distribution of healthcare service in facilities around the country, inadequate quality and quantity of human resources and poor management, inefficiency of the system supply coupled with inefficient use of drugs, and lack of financial resources coupled with inadequate methods of funding and an inefficient use of funds recovered.

### **III – Togo**

**1) Context and background of the health system:** The key sanitary indicators show that, in spite of some significant progress gained in the last years, most of MDGs will not be reached by 2015 (46). The country still has high levels of morbidity and mortality caused by infectious diseases and increasing number of non-communicable diseases.

- Life expectancy is around 59 years (both sexes), largely influenced by the high rate of children mortality - Adult mortality is 340 per 100 000 - Rate of mortality in children under five is still high (110 per 100 000, MDG n°4) - Ratio of maternal mortality is high (350 per 100 000 live births whereas target MDG n°5 was 160/100 000). These deaths are due to post-partum haemorrhage, infectious, complicated childbirth and abortion.
- Malaria is one of heavy burden on the health system.
- Total prevalence of HIV is 3.2% for a population ages 15-49.

The recent analysis of the health sector has shown that the institutional governance, leadership and the management of the health system remain major challenges within the framework of the state reform (47).

- The human resource is characterized by a shortage for certain categories of qualified health workers, and especially an inequitable geographical distribution.
- There is an insufficiency of public subsidies of essential products (vaccines, medicine, medical blood consumables products).

- The health financing system is from the national budget (health expenditure per capita: \$41 with GNI per capita of \$531), the household resource and international financial assistance.
- The sanitary information system (SIS) has diverse sub-systems scattered in various directions of the Ministry of Health without coordination.

To summarize, the maternal, neonatal and children mortality are still rising in Togo. This is partially due to low coverage rates in some essential preventive diseases as well as insufficient performance in the curative care system.

**IV – General comments on the performance of health systems:** The health of people is always a national priority as the government has the responsibility to continue providing healthcare to the population. How well the health system performs depends on how well it achieves the goals for which it should be held accountable. The World Health Organization defined three goals for health systems (48) (figure 8): good health, responsiveness to the expectations of the population, and fair financial contribution. Health systems are not just about improving people with healthcare but protecting them against the financial costs of illness. The challenge for governments in low-income countries is to reduce the burden of out-of-pocket payment for healthcare by expanding prepayment schemes, which spread financial risk and reduce the cost (49). Within governments, many ministries of health focus on the public sector, disregarding frequently the much larger private finance and care providers. A challenge for governments is to harness the energies of the private and voluntary sectors in achieving better levels of healthcare, while offsetting the failures of private markets. A well-functioning health system ensures equitable access to achieving their goals because they have not addressed how medicines and technology essential to saving lives and improving healthcare will be supplied, managed, and used (50).

There is evidence for a positive correlation between the governance, leadership and management, and the performance of healthcare system (51, 52). International donor and other entities have worked to improve the status of healthcare, recognizing the importance of effective governance. In 2000, WHO introduced the concept of stewardship in health sector as “the careful and responsible management of the well-being of the population”. WHO later refined its thinking on this building block, stating that leadership and governance “involves ensuring strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system-design and accountability” (53). USAID has described effective health governance as the process of “competently directing health system resources, performance, and stakeholder

participation toward the goal of saving lives and doing so in ways that are opened, transparent, accountable, equitable, and responsive to the needs of the people” (54).

The quality of overall governance in a country broadly defined as a set of rules and institutions by which authority is exercised directly affects the environment in which the health system operates, as well as the ability of health officials to exercise their responsibilities and health providers to deliver quality services (53). The World Bank has led data collection and reporting on governance, employing indicators on voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. The health system assessment approach uses these indicators as a foundation for assessing the governance building block of the health system. Effective governance should engage and regulate both the public and private sector. Mixed (public and private) health system stewardship mechanisms including regulation, risk pooling and purchasing can offer incentives that align private health actors with public health system goals.

The good governance in health, leadership and management concern the rules and institutions that shape policy, programs and activities related to achieving health sector objectives. These rules and institutions determine which actors play which roles, with what set of responsibilities in order to reach these objectives. It involved three sets of actors (figure 9):

- ✓ State actors, which include politicians, policymakers, and other governments' officials
- ✓ Health service providers
- ✓ Beneficiaries, users of health services and the general public.

This last set can be categorized in a variety of ways by the following items: income (poor versus non-poor) - location (urban versus rural) - service (maternal and child health, reproductive health; etc.) - disease or program (HIV/AIDS, blood safety, vaccines & Immunization).

The linkages among these three categories of actors constitute the operational core of health governance. The figure 9 characterizes the key relationships among the various actors of health system. These linkages exist at multiple levels in the system, depending upon the system's structure. The particular features of these linkages for example, their strength, effectiveness, and the quality influence the ability of health system to meet the performance criteria (equity, efficiency, access, quality and sustainability).

The support of national organizations or programmes is essential to strengthening health systems. In that context, the use of a “whole of system” approach, developing capacity in the full range of organizational competencies essential to a sustainability and effective organization.

By contrast with other frameworks, in which the population is exogenous to health or education systems, ours conceives of the population as the base and the driver of these systems. People generate needs in both education and health, which in turn may be translated into demand for educational and health services.

The providing educational services generate the supply of an educated workforce to meet the demand for professionals to work in the health system. Obviously, people are not only recipients of services but actual co-producers of their own education and health. In this system approach, the interdependence of the health and education sectors is paramount.

***The support for Blood Transfusion, Immunization & Vaccines and HIV/AIDS and strengthening of health sector*** (table IV)

Our study shows that from vertical interventions implemented in specific programs, some benefits have been gained for the whole health system. While it's always difficult to link positive result of health system, across-the-board system improvements and program focus, some indicators might be related to the good performance of target health sector.

In Togo, in spite of socio-political and economic difficulties during the 2000' years, we noticed some positives results. The life expectancy has risen at 59 years which is higher than the average in sub-Saharan African countries (53 years). We also recorded that the number of polio cases, measles at age 0-14 years, the under-5 mortality (MDG n°4), maternal mortality (MDG n°5), incidence of TB as well as HIV prevalence and the annual number of new infection with HIV have significantly fallen (0, 295 without death, 110 per 100 000, 350 per 100 000, 73 per 100 000, 3.2%, and 7700 respectively). Furthermore, the average number of ARVs coverage, immunization against DTP3, Pentavalent vaccine and Polio vaccine has significantly increased (42%, 92% and 89%). In parallel, with the funding support of the French Agency for International Development, most of indicators showed that the Blood safety has significantly been improved. In spite of relative fragility of the system related to the low level of government financial support, this improvement has generated positive benefits on the morbidity as well as mortality of the children and women in post-partum.

In Congo-Brazzaville, in spite of some positives results recorded in the sector of the fight against AIDS, overall performance of the health system remained low. Key indicators show that health status has not changed from 2005. As objectives, the life expectancy has fallen at 55 years (60 years in 1990). The cases of measles at age 0-14 years (1300 with at least 300 deaths), the under-5 mortality (128 per 100 000 versus 104 per 100 000 in 1990), the maternal mortality (781 per 100 000 versus 460 per 100 000 in 1990), incidence of TB (390) as well as HIV prevalence (3.3%) and annual number of new infection with HIV have stabilized or increased.



The National AIDS Council, through the funding support of the World Bank and the government, has reached some objectives which have contributed to the limitation of HIV/AIDS in this country. As shown by some indicators (e.g.% of population reached through HIV/AIDS IEC/BCC radio/TV programs : 94% in 2011 versus 54% in 2007 - % of adults infected with HIV: 4.5% versus 3.3% – number of people living with HIV: 110 000 versus 83 000 - annual number of new HI infection: 7900 versus 13 500 – annual deaths attributable to HIV: 4 600 versus 10 777 - % of pregnant women attending prenatal consultations accepting voluntary testing for HIV : 76.8% versus 16% - % of HIV-positive pregnant women who receive antiretroviral medicines to reduce the risk of mother-to-child transmission (MTCT): 60.6% versus 40.7% - Number of PLWHA benefiting from ARV treatment : 21 940 versus 11 577 - % ART coverage : 44% versus 15%.

Transfusion System from the same sources (World Bank and government); its performances are not satisfactory and do not reflect the level of investment. In fact, some positives results have been recorded (e.g.: increase of number of blood donation, partial policies and management procedures as well as supervision of the system partially implemented, screening of major transfusion transmitted agents). Nonetheless, there're still several challenges to overcome in order to strengthen the health system. For examples, the total numbers of blood units re-tested for HIV+/-, as well as the incidence rate for residual risk for transfusion-transmitted HIV infection are still significantly high to guarantee the blood safety of blood transfusion.

The National Immunization Program also has shown a lot of weaknesses at different levels of the chain. In spite of the significant funding support from the Global Alliance for Vaccines and Immunization (GAVI), recorded about the coverage rates have shown some progresses but, once again, there are still gaps which must be filled to generate any significant impact on the whole health system. Although the percentage of DTP3 coverage rate from official country is close to the UNICEF/WHO estimate (90%), the Penta3 coverage rate was 52% in 2011 (91% in 2009) with the high level of dropout DTP1/DTP3 (9%). There are still some districts achieving less than 50% DTP3 coverage (3%). On the other hand, despite the measles coverage rate of around 90%, the country faced with the re-emergence of measles despite the follow-up campaign conducted in Dec 2010. More importantly, the polio eradication was still a big issue as shown by an outbreak in 2010, with more than 600 cases (more than 250 deaths, mainly teenage boys 15-25 years old).

### 3 - General discussion

Health systems are complex, dynamic systems existing in a world characterized by limited resources and changing demands related for new public health challenges (52). Efforts to improve health in low and middle-income countries (LMIC) are often limited by tensions between horizontal approaches, which seek to tackle health problems 'on a wide front, through the creation of a system of permanent institutions commonly known as general health services', and vertical approaches, which tackle one specific health problem through targeted delivery, coordination, financing, or information mechanisms (55, 56). While vertical approaches increase the coverage of targeted interventions, their parallel mechanisms undermine and fragment health systems (57, 58, 59). For example, a vertical approach to the scale-up of antiretroviral treatment (ART) drains staff away from general services and establishes parallel drug supply mechanisms that bypass and undermine national systems (60, 61), whereas a horizontal approach strengthens capacity of general services and existing health system drug-delivery systems which include catering for ART scale-up needs (62, 63, 64). Thus, approaches that maximise synergies between health systems and programs are recommended, including the diagonal approach to strengthen health systems through pursuing priorities for specific disease, or full integration of vertical programmes within health systems (65, 66, 67). However, some actors international health have argued that disease-specific interventions implemented in vertical approach are unsustainable and a way of wasting scarce financial resources whereas others public health actors believed that current Health System Strengthening strategies are in fact selective, disease-specific interventions, and their effects may undermine progress to the long-term goal of an effective, high-quality, inclusive health system (68, 69, 70, 71). This has led to growing interest in broader strengthening of health systems (72, 73).

Until 2011, health average spending was of 5% of GDP in African countries versus 12% in France and almost 20% in the US) (74, 75). At the same time, it should be noted that the past decade has seen unprecedented political attention paid due to challenges caused by health system in developing countries, as demonstrated by extraordinary growth in the level of international financing (Development Assistance in Health has increased dramatically over the past two decades, almost doubling from \$5.7 billion in 1990 to \$10.8 billion in 2001, and nearly tripling to \$28.1 billion by 2012) and a diverse array of new actors engaged in global health generally (76, 77). This rapid expansion has contributed to impressive achievements such as a dramatically scaled-up response to the HIV pandemic (78, 79), improved control of malaria in many endemic countries, reinvigoration of research and development of medicines for diseases that primarily affect the world's poor and exceptional declines in maternal and childhood mortalities, among others (80,

81). However, this unprecedented amounts of money invested did not yield the expected return in terms of improved health outcomes: intermediate evaluations reveal that some progress has been made but that many African countries are not on track to achieve the health MDGs by 2015 (82). A report by the countdown to 2015 for maternal, new-born and child survival initiative showed that the coverage of preventive interventions that can be planned intermittently, such as antenatal care, is much higher than the coverage of interventions that require well-functioning, around-the clock services, such as emergency obstetric care. This unprecedented level of funds flowing into the global health sector has highlighted the lack of countries' capacity to address health system constraints (83). In fact, in most of sub-Saharan African countries, health system weaknesses were identified as the major obstacles hampering the progress of diseases control programs (DCPs). Key actors in government such as the ministry of health and national AIDS commissions do not have the organizational and management capacity to provide direction, align activities with national strategies and plans, and execute their assigned functions (84, 85, 86).

Our study on the performance of targeted and vertical health interventions analyses six core competencies of three health sectors (Blood Transfusion System, Vaccines and Immunization and National AIDS Councils) in two Sub-Saharan African countries: Congo-Brazzaville (Central Africa) and Togo (West Africa). The comparative study (situation in 2005 versus 2011), explores the following points: the organizational governance; leadership and management; technical expertise; resource mobilization and coordination capacities, health outcomes based on selected keys indicators for health performance. The analysis of the functioning of targeted vertical health programs highlights the importance of political vision, interest and proactive commitment, good and accountability governance, leadership and management on the health status of people living in each country. Beyond funding, which is an important factor, the above capacities are essential for the improvement of health outcomes and therefore its positive impacts on the health system, development and well-being of communities.

In 2011, Congo-Brazzaville with substantial financial resources (GDP \$2.943 for 4.233.063 inhabitants) and significant financial supports from partners of the development (European Union, World Bank, Global Fund, GAVI Alliance, bilateral cooperation with developed countries such as European Union, France, Germany, Japan, etc.) had a per capita total expenditure on health of \$72 (\$90 in 2000) whereas the average in the African region was around \$140. Worse, the total expenditure on health as percent of GDP was only 3.4% whereas the average in Sub-Saharan African countries was around 7% (75) and the recommendation formulated by African Union in Abuja was 15% (87). In contrary, Togo had limited national financial resource (GDP \$531 for 6.283.092 inhabitants), which

was already stressed by drastic decrease of the international assistance due to the withdrawal of all of funding agencies as consequence of political unrest and slaughters that arisen in 2005. Although the per capita total expenditure on health was only \$41, the total expenditure on health as percentage of GDP has reached the rate of 6% (75).

Analysis of keys indicators regarding the governance, leadership and management in the organisation and vertical program shows that in Togo, even with some issues regarding its human resources and limited funding, has an overall improvement if its health system between 2005 and 2011. Because of the commitment and support of the government, most of health system indicators show steady progress compared to the Congo's health system. As for examples, some health indicators highlight the differences between the two countries: life expectancy of 59 years in Togo (54 years in 1990) versus 55 years in Congo (60 years in 1990); adult mortality of 340 per 100 000 (389 per 100 000 in 1990) versus 385 per 100 000 in Congo (271 per 100 000 in 1990); children under-five mortality (MDG n°4) of 110 per 100 000 (142 per 100 000 in 1990) versus 128 per 100 000 (104 per 100 000 in 1990); maternal mortality (MDG n°5) of 350 per 100 000 (640 per 100 000 in 1990) versus 781 per 100 000 (460 per 100 000 in 1990); annual incidence of TB (MDG n°6): 73 versus 390; prevalence of HIV: 3.2% versus 3.5%; HIV incidence estimated annual number of new Infections (all ages): 9,500 versus 11,000; annual number of AIDS deaths: 7,700 versus 8,500; percentage of children immunized against DTP3: 92% versus 90%; percentage of children immunized against Pentavalent vaccines: 89% versus 52%; number of measles at ages 0–14 years : 295 (zero death) versus 1300 (150 deaths) ; number of polio cases at ages 0–30 years : zero versus more than 600 (more than 250 deaths, mainly young men 15-24 years) ; prevalence of paediatric bacterial due to Hemophilus influenza) among children less than 5 years : 43% versus 65%.

As mentioned above, the improvement of Togolese's health programs lies in its of political vision and commitment, accountability governance, leadership and its overall management. This success was also linked to the human resource capacities which are keys in supporting the health system and the achievement of MDGs. We think that acquiring these capacities will also be helpful in providing the universal health coverage, especially through primary health-care and social protection mechanisms and to guarantee access to health services for all, in particular for the poorest segments of the population (88). Unless the deep reforms and strong decisions are taken and implemented, starting with strengthening these capacities by the stakeholders at different levels of health sectors, including the program leaders as well as health organizations and civil society, the performance of health systems will not make significant progress (89). That means health status of populations in both countries, especially in Congo-

Brazzaville, will remain low and sadly, these weaknesses will still be responsible for several hundred of deaths annually.

Although each healthcare systems is unique, there are some common factors such as political vision and commitment that can have significant impact in mobilizing all those who can contribute to better health programs and health system (10, 40). Face with the shortage in funding (figure 10 shows the Gap of \$38 billion/Year from 2015 – 2025) and human resources, the healthcare systems should embrace innovation. It should adapt to the changing needs of the population while maintaining continuity over time. More importantly, it should combine resilience with flexibility and should develop mechanisms that allow it to learn from the past and anticipate the future (40).

In 2012, the political momentum led by the WHO for support of the Universal Health Coverage (UHC) has underscored the urgent need for an adequate, skilled, well-trained and motivated health workforce (90). In this context ensuring that appropriate human resource for health strategies and priorities are effectively embedded in the UHC and post-MDG agenda becomes crucial. Both countries need to address the problems regarding their shortfall in human resources in order to sustain gains they have made in their respective communities, especially for vulnerable peoples. Otherwise, the shortage in qualified staff would affect their ability to achieve the Millennium Development Goals (MDGs) and their efforts to scale up their response against public health challenges and attain universal health coverage will be limited if not failed.

In fact, for the last years, there has been a broad consensus in the global health community on the need for health systems strengthening (HSS) to make further progress toward the Millennium Development Goals (MDGs) in Sub-Saharan Africa (91, 92). However, there is still divergence on how to strengthen health system, what HSS practically entails, and how it should be done. Despite the abundance of evidence on the efficacy of interventions that can save lives at low cost, the pathways to effectively deliver health services in Sub-Saharan Africa are not well known (40).

In Congo and Togo, like in other sub-Saharan African countries, common Health System's weaknesses include poor infrastructure, insufficiency of human resources in quantity and quality, frequent stock-outs of drugs and other health commodities, lack of good monitoring of data, and deficiencies in political vision, health accountable governance, leadership and efficient management (93). These weaknesses contribute to a limited "absorptive capacity" of health systems to effectively and efficiently use of the resources from some international funding agencies. On the other hand, the lack qualified local

sources of technical assistance and training justifies the dependent on international sources (94, 95).

The global economic crisis has, thus far, had little more than a slowing effect on the growth of development assistance for health (DAH) and country spending on health (96). Taking into account the decrease of international financial resource for the development of social sectors including the health system component (97, 98), in order to accelerate the process of acquiring new knowledge and skills as well as the change of attitudes of stakeholders of health sectors, we propose a strategy starting by strengthening the human resources capacities in both countries (Congo-Brazzaville and Togo). In other words, to impulse the process of improving the performance in health system's components, the easiest and cost-effective way should first focus on the effectiveness of personal based on the responsibility, choice, excellence and integrity (99, 100). We believe that in the National Blood Centre, Immunization Programs and National AIDS Councils, where human resource management (HRM) is solely neglected, making improvement begins with leadership. It requires managers to take charge as well as leaders who can develop strategic partnerships with other stakeholders of health system, influence policy-makers and forge new directions for human resource in the organization.

In fact, in spite of the critical importance of HRM on the functioning of health system, there haven't been enough concerted efforts to address the severe staff shortages facing health sector in developing countries (101). Like in many Sub-Saharan African countries, in Congo-Brazzaville and Togo, HIV/AIDS pandemic has intensified an already serious situation, as most of qualified health workers have migrated towards developed countries to get best salary and working conditions (brain drain). Therefore, it has limited abilities of these countries to meet the Millennium Development Goals (MDGs). Among several identified bottlenecks (102), and several other challenges that needed to be addressed there are:

- ✓ the increase in employee satisfaction and productivity in the face of understaffing, low salaries, and lack of resources,
- ✓ obtaining accurate data in the health system and managing the workforce in the face of under staffing,
- ✓ match the skills and competencies required with those working in healthcare, already reduced by HIV/AIDS, migration abroad, and poor working conditions,
- ✓ provide efficient and effective HR management and supportive supervision.
- ✓ shift tasks to workers who have, or can easily develop the needed skills.

These challenges will only be met, and the current HRM crisis resolved, if there is a proactive commitment from the government, visionary and inspired leadership from health

sector leaders, accountability governance and effective management of HS (103). Leadership is essential in strengthening the organization of HRM system. In the health organizational system of both countries, it will certainly be helpful to set up leadership at all levels into the system. In other words, leadership should not be an exclusive domain for a small and selected group of exceptional men and women. All the stakeholders and actors of health organizations should be involved in the new process of learning to be part of a new generation of leaders (figure 11) capable to handle and manage most of the health challenges that HS faced in their countries and, to find out the realistic and cost-effective solution (104). To grow and move ahead towards this way, staff of these organizations need support and feedback from peers, supervisors, coaches and experts (regional or international) and leadership skills into these organizations should not be developed in isolation (figure 12). Organizations need strong leaders, both those with direct responsibility for HRM as well as senior-level leadership within organization, to support and integrate the various functional areas of HRM (figure 13). Leader should be positive, and have a people-centred philosophy and a set of values in which employees are viewed as assets entitled to equity, respect, appreciation and support.

Furthermore, beyond our remark on health system, there should be a “knowledge broker” at the central level (Ministry of Health) with the main mission of gathering, sharing, facilitating and monitoring key and strategic information with a core of all stakeholders including end users and communities’ representative.

**V - Recommendations:** Based on my working experience in these countries and taking into account the scarcity of the funding resources and increasing burden (most of communicable diseases are not under control and there is a rapid growth of chronic non-communicable diseases) in the context of worldwide economical crisis, most of recommendations will consist of strengthening human resources and the management of key strategic information. These recommendations are suggestions for many of the topics discussed. The next chapter describes a tentative action plan to implement the short-term recommendations.

#### o 1) Short-term recommendations

- ✓ ***a) Promote the interest and proactive involvement of the government.***  
Establish a strategy which aims at raising and engaging the interest and commitment of political leaders and decision-making with visionary and inspirational leadership for health sector leaders.
  
- ✓ ***b) Define a clear mission, shared vision, and a strategy coupled with good governance in health system***

Governments of these countries (at the highest level in the hierarchy meaning the head of government and Special Advisor of the President in charge of humanitarian, social and health issues) should define their mission, vision and strategy in regard of the challenges faced by the public health. More specifically, there should be action plan to reinforce the human resources in Health System sector.

✓ **c) Launch and develop serious reforms with the implementation, step by step of the nine elements that contribute to organizational health:** accountability, health system governance and management capabilities, coordination and control, culture and climate, direction, external orientation, innovation and learning, leadership, and motivation.

✓ **d) Initiate innovation in Health systems**

Introducing new dynamics in public health arena can lead to an incredible set of cross-disciplinary thinkers and leaders sharing insights and information to implement a systems-thinking approach to break the silos in healthcare innovation. In fact, through the public health forum, people from various backgrounds will be encouraged to join and engage with new and inspiring ideas, which will contribute to unique collaborative exchanges, networking opportunities, and interactive learning to figure out and find the best solution to resolve the national public health issues.

✓ **e) Appoint “knowledge broker” (K.B) at the central level (Ministry of Health)**

With the main mission of gathering, sharing, facilitating and monitoring key strategic information with a core of stakeholders, including end users/communities' representatives, the “K.B” with experience in public health issues, competences in leadership, management and communication/negotiation skills, should have a direct access to the Ministry of Health, the General Secretary of Health and/or General Director of Health.

○ **2) Medium-term recommendations** will contribute to the long-term sustainability and ensuring the achievements of the HSS include:

▪ **a) Develop the process of acquiring new knowledge and skills as well as the change of attitudes among the stakeholders in health sectors**

Build the transformative and interdependent professional education and health system approach. This process of acquiring new competences should include strategic thinking, ability and capacity of balancing the functions from professional health worker to public health leader and manager. Moreover, new educated leaders in public health should be positive and have a people-centred philosophy and a set of values in which health workers are viewed as assets entitled to equity, respect, appreciation and support.

✓ **b) Develop the Executive Leadership team at all levels to build a health system that combines flexibility and resilience**

The executive leadership team, in preparing the responses (benchmarking) should be responsive to health changing needs of their population while maintaining good health services delivery and continuity over time. That means the team should manage and impulse for building a health system which combines the resilience and flexibility as well as mechanisms that allow them to learn from the past mistakes and anticipate the future.

▪ **c) Develop mechanisms to mobilize financial resources**

In order to increase funding necessary to build functional, flexible and resilient HS, the authorities should set up various financing mechanisms able to raise funds beyond public sector (such as from private donors). The implementation of these resources mobilization requires additional competencies including



communications/negotiation skills, monitoring and evaluating plans for resources mobilization, implementation of transparency and accountability practices.

- **d) Promote and expand health financing mechanisms to reach a large bunch of population**

Due to the limited financial capacities of the majority of communities and in order to reach the universal health coverage, it's essential to have various instruments such as health insurance policy or other innovative approaches accessible for those people in need. Based on some experiences implemented in African countries (e.g.: Senegal, Burkina-Faso with SKY project on Health Insurance funded by AFD – J-PAL approach in DRC- CHAD), the authorities should provide a system for health insurance for their communities.

- **e) Promote health as a fundamental right** which must be at the top level of the constitution of these countries

- **3) Action Plan to implement above short-term recommendations (Table V).**

## Conclusion

With the increased focus on strengthening and integration of health system in Congo-Brazzaville and Togo, our work has contributed in providing some information on the links between the supports from national political authorities, with good health governance, leadership and management and the results achieved through vertical interventions on health system.

Much of this study is devoted to show how political commitment, health governance, leadership and management are closely linked to the positives outcomes of targeted health interventions through vertical project/program (e.g.: Blood safety – Vaccines & Immunization – National Council against HIV/AIDS) as well as to the overall performance of health system.

Although significant funding has been flushed in some vertical health programs, it didn't generate clear results on the whole health system because there was lack the ingredients for success such as accountability governance, leadership effective and results-oriented management. Worse, this was in sharp contrast with the level of Congo's GNP (\$2.943) as compared to the proportion of resources allocated for health in national budget (3.4%), whereas Togo's health expenditure was nearly the double (6%) with a GNP five times low (\$531).

In the context of financial constraints, the results-focused on the cost-effective delivery of health services and proof of health impacts should be part of both countries' priorities. Starting with the efforts of strengthening the capacities of human resources at different level of their respective health systems, the high level of national authorities should be engaged in the process that would define objectives, establishing indicators, and measuring outcomes of overseas health system.

This may drive building capacities to respond to population needs and build resilience into health systems into Congo-Brazzaville and Togo to face public health challenges, avoid political unrests and long-term economic crises. It will be critical for these two countries to implement the short term recommendations to initiate the process of strengthening the capacity building of health systems and be able to respond to their communities' health needs.

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# Appendices

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Fig 1 - Maps of Congo and Togo

## Table I - Comparative functioning of National Blood Safety systems

Key indicators	Base line Situation in 2005		Expected results (2012)		Results obtained (2011)	
	Congo- BZV	Togo	Congo- BZV	Togo	Congo- BZV	Togo
Total number of Blood donation	33 508	10 092	40 000	60 000	52 950	35 852
Number of blood units qualified	<b>33 508</b>	<b>8 438</b>	<b>35 000</b>	<b>55 000</b>	<b>47 994</b>	<b>34 904</b>
% of unpaid blood donation	<b>10%</b>	<b>70%</b>	<b>100%</b>	<b>100%</b>	<b>50%</b>	<b>100%</b>
% Family Donor	<b>60%</b>	<b>30%</b>	<b>0%</b>	<b>0%</b>	<b>40%</b>	0%
% Paid Donor	30%	0%	0%	0%	10%	0%
National blood policy and regulation	In process	In process	Implemented	Implemented	Implemented	Implemented
Management Procedure of BTS	N.D	N.D	Implemented	Implemented	Partial	In place
Supervision of blood system	N.D	N.D	Performed	Performed	Partial	Conducted
Blood transfusion guidelines and Good Practices	N.D	N.D	Implemented	Implemented	No	Implemented
National (or regional) blood transfusion advisory committee	No	No	Implemented	Implemented	No	Implemented & functional
Guidelines and processes of control of analysis and compatibility	No	No	Implemented	Implemented	No	Implemented & functional
Tracking system ⇔ haemovigilance system	N.D	N.D	Implemented	Implemented	ND	Implemented
% of regular blood donors vaccinated against HBV	0%	0%	100%	100%	0%	100%
Estimate of whole blood units screened "according to WHO standards"						
1) HIV	100%	100 %	100 %	100 %	100 %	100 %
2) HBsAg	100%	100 %	100 %	100 %	100 %	100 %
3) HCV	<b>34%</b>	100 %	100 %	100 %	100 %	100 %
4) Syphilis	<b>13%</b>	100%	100%	100%	100%	100%
Blood products are prepared						
1) <b>Whole blood</b>	<b>100%</b>	<b>100%</b>	0%	0%	<b>100 %</b>	<b>15%</b>
2) Red-cell concentrates	0 %	0%	100%	100%	0 %	<b>85% (75% CGRA</b>
3) Platelet concentrates	0 %	0%	100%	100%	0 %	<b>- 25% CGRE)</b>
4) Fresh frozen plasma	0 %	0%	100%	100%	0 %	<b>112 CSP</b>
5) Cryoprecipitate	0%	0%	0%	0%	0%	<b>2283 PFC</b>
Total Number of Blood Units re-tested (HIV+ and HIV-) with "right" results	<b>3.52%</b>	<b>2.83%</b>	0%	0%	<b>2.64%</b>	<b>0.68%</b>

Estimate of the residual risk of transfusion-transmitted HIV - Incidence rates and RR of transfusion-transmitted HIV infection ✓ Number of HIV incident cases (Dec. 2002 – Dec. 2008) ✓ Incidence rates per 100,000 per year (95% CI) ✓ RR per number of donations (95% CI)	N.D	N.D			22 64.9 1/25.600	7 30.1 1/25.000
% of unsatisfied demands from Paediatrics and obstetrical services	N.A (>30% of postpartum maternal mortality ⇔ haemorrhage)	12% (>25% of postpartum maternal mortality ⇔ haemorrhage )	5%	5%	ND	10%
Number of adverse effects notified	N.A	N.A	Report	Report	N.D	N.D
Supply chain management and forecasting	N.D	N.D	In place	In place	N.D	In place
Rate of units rejected (not qualified)	N.A	N.A	< 1%	<1%	N.A	0.09%
Cost of qualified unit	N.A	N.A	-	-	\$64	\$63
Charge cost of unit	\$15	\$12	No charge	No charge	\$15	\$8
Funding from the national budget available for the BTS	\$962,085	\$109,033	\$2,244,802	\$3,456,533	\$1,765,097	\$587,510
Funding from International Agency	\$3,722,796 (World Bank)	\$4,938,340 (AFD)	-	-	-	-
Personal including staff members 1. Doctor 2. Lab Master Degree – Quality Specialist 3. Phlebotomist (Nurses) 4. Technician 5. Other	N.A	N.A	WHO/AFO standard	WHO/AFO standard	80 3 0 15 28 38	109 10 15 15 25 44
Personal Training, and Certification of Staff	0	0	Accreditation	Accreditation	2	8
Evaluation of practices	N.D	N.D	Once a Year	Once a Year	N.D	Done

N.A: Not available - N.D: Not done

\* **Keys indicators ⇔ Global Health Objectives ⇔ Direct Impact on Public Health**

**Table II - Comparative functioning of Immunization systems in 2011**

Indicators	Country's outcomes	
	Congo-BZV	Togo
<b>General Information</b>		
Total population	<b>4.233.063</b>	<b>6.283.092</b>
Surviving Infants (surviving to 1 year per year)	164.282	257.480
Infant mortality rate (deaths < 1 year per 100 000 births, 2011)	63.80 /100 000	72.90 /100 000
Child mortality rate (deaths < 5 years per 100 000 births, 2011)	<b>98.8/100 000</b>	<b>110/100 000</b>
Gross Nation Income (per capita US\$, 2011)	<b>3.090</b>	<b>560</b>
N° of districts and territories	30	35
Co -financing status under GAVI's policy (2011)	Graduating	Low-income
<b>Planning and Management</b>		
Country Multi Year Plan for Immunization cCMYP with costing	2011 – 2015	2011 - 2015
Annual Work Plan for Immunization	Yes	Yes
Year of last inventory of all refrigeration equipment assigned for public immunization services	2010	2010
Supportive supervision with on-site training performed at district and lower level	No	No
<b>Inter-agency Coordinating Committee (ICC) and Health Sector Steering Committee (HSCC)</b>		
Did the country have a functional ICC and HSCC? Vaccine Review Committee	<ul style="list-style-type: none"> <li>✓ Yes for ICC - 11 members, including 4 CSO, UNICEF and WHO – Presided by the MOH (chair) or the DGH (deputy chair)</li> <li>✓ Meeting : 4 times a year, mostly for GAVI's APR ⇔ Minutes</li> <li>✓ Not really functional</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two committees are active in Togo: the inter agency coordination committee and the health sector coordination committee</li> <li>▪ 3 meetings</li> </ul>
<b>National Immunization Advisory mechanism</b>		
Did the country have a standing technical advisory group on immunization?	No	In process
<b>Immunization Program Management</b>		
Did the Immunization Program is well-managed?	<ul style="list-style-type: none"> <li>✓EPI's performance increased ⇔ DTP3 coverage from 31% in 2001 to 90% in 2010 under GAVI support</li> <li>✓EPI review conducted in 2010 found deficiencies with immunisation data and suggested that the DTP3 coverage should be revised from 90% to 81% for 2010, with a target to</li> </ul>	<ul style="list-style-type: none"> <li>✓ EPI's external review planned for 2012</li> </ul>



	improve coverage to 86% in 2011 ✓ Crisis management approach	
<b>New and under-utilized Vaccines Support (NVS)</b>		
<b>Stock-outs of vaccines and supplies</b>	Gaps for Pentavalent (DTP-HepB-Hib) and the Yellow Fever	Only for BCG syringes
<b>Vaccine Management</b>	Cold Chain capacity & EVM conducted on Dec 2010	Cold Chain capacity/Effective Vaccine Management conducted on April 2011
<b>Wastage</b>	Pentavalent (8%) – Y.F (17%)	Pentavalent (1%) – Y.F (16%)
<b>System performance - Coverage levels</b>		
<b>Coverage report completeness</b>	Partial, mainly from unreached rural areas	Nearly completed
% DTP3 coverage WHO/UNICEF estimates (2011)	90%	92%
% DTP3 - Official country estimates (2011)	90% WHO/UNICEF and Country estimates have matched since the last ten years	92% 100% correlation between JRF and WHO/UNICEF DTP3 coverage estimates over the last 8 years
% DTP3 Household survey: DTP3 coverage Last DTP3 survey (2009)	71.85%	72.45%
	72%	72%
% districts achieving > 80% DTP3 coverage (2011)	<b>73%</b>	<b>86%</b>
% districts achieving < 50 % DTP3 coverage (2011)	<b>3%</b>	<b>0%</b>
% of Dropt out DTP1/DTP3	<b>9%</b>	<b>3%</b>
% of BCG coverage	<b>95%</b>	<b>90%</b>
% MCV1 coverage	<b>90%</b> Country faced with the re-emergence of measles despite the follow-up campaign conducted Dec. 2010	<b>67%</b>
% Penta3 coverage	<b>52%</b> (2011) versus <b>91%</b> (2009)	<b>89%</b>
% of Y.F coverage	<b>90%</b>	<b>85%</b>
% of HepB3	<b>90%</b>	<b>81%</b>
<b>Injection Safety Support and Adverse Events Following Immunization Systems</b>		
Does the country have an Immunization injection safety policy/plan?	Yes, auto-disable syringes were widely used across the board. However systematic use of safety boxes were not common	Yes, systematic use of auto-disable (AD) syringes for injections, safety boxes for the collection of used AD syringes Country has an institutional development plan for vaccine safety

Medical wastage management	The use of incinerators as a means of waste disposal needs to be strengthened. Sharps are disposed of through burning and burying	Incineration as the method of destroying sharps waste. malfunctions, incinerator breakdowns, insufficiency and age of the equipment of the personnel in charge of incineration at the sites
Is there any functional monitoring and surveillance system in place for Adverse Events Following Immunization (AEFI)?	<ul style="list-style-type: none"> <li>✓ Some adverse events following immunization (AEFI) have been reported in the health districts' monthly immunization report.</li> <li>✓ No implementation of a pharmacovigilance system</li> <li>✓ No policy for AEFI in place</li> </ul>	There is a national AEFI expert review committee in charge of vaccine pharmacovigilance
<b>Finance - Vaccine Co-financing and Financial Sustainability</b>		
Line item in national budget for vaccines	Yes	Yes
Total expenditures (from all resources) allocated for vaccines used in routine immunization (2011)	<b>\$7.339.710</b>	<b>\$9 835 908</b>
<ul style="list-style-type: none"> <li>✓ % of routine vaccines funded by government</li> <li>✓ GAVI</li> <li>✓ UNICEF</li> <li>✓ WHO</li> <li>✓ Other sources (e.g.: Sabin Institute – JICA – European Union)</li> </ul>	<ul style="list-style-type: none"> <li><b>36%</b> (\$2.666.654)</li> <li><b>23%</b> (\$1.720.500)</li> <li><b>19,1%</b> (\$1.404.906)</li> <li><b>18.9%</b> (\$1.387.539)</li> <li><b>2%</b> (\$160.111)</li> </ul>	<ul style="list-style-type: none"> <li><b>50%</b> (\$4 926 917)</li> <li><b>25.4%</b> (\$2 498 000)</li> <li><b>9.5%</b> (\$ 937 626)</li> <li><b>13.1%</b> (\$1 291 000)</li> <li><b>1.8%</b> (\$ 182 365)</li> </ul>
<b>Maternal and neonatal tetanus (NT) elimination</b>		
Protection at birth (PAB) against neonatal tetanus	83%	81%
<b>Polio eradication</b>		
Number of Acute Flaccid Paralysis (AFP) /100,000 children less than 15 years of age	<b>More than 600 cases (more than 250 deaths, mainly men teenagers 15-25 years old)</b>	<b>0 in 2011</b>
<b>Supplementation immunization (Campaigns) and other diseases prevention</b>		
<ul style="list-style-type: none"> <li>✓ Polio vaccine delivery</li> <li>✓ Vitamin A supplements integrated with routine service</li> <li>✓ Albendazole / Mebendazole (cure intestinal parasites)</li> <li>✓ Bed net with insecticide (Prevention of Malaria)</li> </ul>	7 rounds ⇔ Outbreak in 2010	1 694 209
	Yes	1 457 869
	Yes	1 284 359
	Yes	ND

\* Keys indicators ⇔ Global Health Objectives ⇔ Direct Impact on Public Health

**Table III - Comparative functioning of National AIDS Council**

Indicators	Country's outcomes					
	Congo-BZV			Togo		
	Baseline Value/data (DHS 2005)	Target Strategic Plan (2015 ⇔ MDGs)	Value Achieved (DHS 2011)	Baseline Value/data (UNGASS Report 2005)	Target Strategic Plan (2015 ⇔ MDGs)	Value Achieved (HLM 2011 follow-up)
<b>Governance, Management and Coordination Capacities</b>						
<b>Strategic Leadership</b>	ND	Achieved	Partially	ND	Achieved	ND
<b>Support for programme implementation</b> <ul style="list-style-type: none"> <li>✓ Capacity Building of Implementing Programmes</li> <li>✓ Mainstreaming Public Sector Programmes</li> <li>✓ Essential Commodities</li> <li>✓ Health Sector HIV Service Delivery</li> <li>✓ Community based HIV Programmes</li> </ul>	ND	Achieved	Partially	ND	Achieved	Partially
<b>Governance and Strategic Information</b> <ul style="list-style-type: none"> <li>▪ Collecting data ⇔ generate useful information ⇔ adapt strategic decision and policies</li> <li>▪ Information Plan</li> <li>▪ Accountability and Verification</li> </ul>	ND	Achieved	Partially	ND	Achieved	Partially
<b>Management system</b> <ul style="list-style-type: none"> <li>○ Performance management system</li> <li>○ Evidence-Based Management</li> <li>○ Results oriented system (appropriate tools)</li> <li>○ Strategic planning system</li> </ul>	ND	Achieved	Partially	ND	Achieved	Partially
<b>Mobilization of resources</b>						

<ul style="list-style-type: none"> <li>Capacity of resources (financial and human) mobilisation</li> </ul>	Low capacity	National resources (public and private sectors) support overall activities of HIV/AIDS	Partially achieved	Low capacity	National resources (public and private sectors) support overall activities of HIV/AIDS	Low capacity 14.4% vs 85.6 from International funding agencies
<ul style="list-style-type: none"> <li>Number of coordination meetings held each year</li> </ul>	CNLS: 0 Steering Com.: 2	CNLS: 0 Steering Com.: 2	CNLS: 0 Steering Com.: 2	CNLS: 0	Steering Com.: 2	CNLS: 0 Steering Com.: 0
<ul style="list-style-type: none"> <li>Budget for NAC</li> <li>Government</li> <li>International funding agency</li> </ul>	- \$3.26M (W.B and G.F)	NA	\$1.961 759 -	- \$261 602 (Global Fund)	\$ 4 395 600	\$359 071 -
<b>Coordination of stakeholders</b>						
<b>Leadership in coordinating all stakeholders involved on HIV</b> (national, NGO, United Nation partners and other funding agencies) <ul style="list-style-type: none"> <li>Framework for periodic exchange with specific channels ⇔ share strategic information (keys stakeholders)</li> </ul>	ND	Achieved	Partially	ND	Achieved	ND
<ul style="list-style-type: none"> <li>Number of sectors (ministries) which implement more than 80% of the agreed Action Plan.</li> </ul>	0	12	15	0	15	10
<ul style="list-style-type: none"> <li>Number of health facilities providing quality treatment of STI in the regions</li> </ul>	0	23	46	0	30	15
<b>Monitoring of selected activities</b>						
<ul style="list-style-type: none"> <li>Number of regional HIV/AIDS committees (UDLS) reporting annually on at least 75% of M&amp;E indicators</li> </ul>	11	12	12	10	20	15
<ul style="list-style-type: none"> <li>% of population reached through HIV/AIDS IEC/BCC radio/TV programs</li> </ul>	53.9%	90%	94%	47%	90%	71,5%
<ul style="list-style-type: none"> <li>% of schools teaching HIV/AIDS modules in national curricula</li> </ul>	Primary: 0% Secondary:100% Technical: 0%	Primary: 60% Secondary:100% Technical: 60%	Primary:33.4% Secondary:35.2% Technical: 50.0%	493		343
<ul style="list-style-type: none"> <li>Number of people living with HIV</li> </ul>	110,000		83,000	140 000		150.000



○ % of adults infected with HIV	4.5%		3.30%	3.5%		3.4%
○ Annual number of new infections (adults and children)	13 500		7.900	14 000		9 500
○ Annual number of deaths attributable to HIV (adult)	10.777		4,600	11 000		8 900
✓ % of pregnant women attending prenatal consultations accepting voluntary testing for HIV	16.0%	90%	76.8%	57.2%	90%	61.7%
✓ HIV prevalence among 15-24 year old pregnant women	2.6%	2%	2%	3.3%		2.7%
✓ % of HIV-positive pregnant women who receive antiretroviral medicines to reduce the risk of mother-to-child transmission (MTCT)	40.7%	80%	60.6%	32.8%	95%	60.7%
✓ % of pregnant women testing positive who benefit from the global care, support and treatment strategy	ND	80%	68.7%	ND	80%	48%
✓ Number of infants born HIV positive and treated according to national protocols	632	1485	1320	ND		3270
✓ Prevalence of STI among pregnant women	3%	2%	8.2%	2.5%		1.2%
▪ Number of PLWHA benefiting from ARV treatment	11.577	15.000	21.940	3.972	55 000	29 045
▪ % ART coverage	15%	70%	44%	14%	80%	42%
▪ Orphans due to AIDS aged 0 to 17	10.317	30.000	51 000	71 000	55 000	89 000
▪ No. of orphans and vulnerable children (OVC) receiving a package of services	2000	30.000	11.764	ND	55 000	9 500
▪ Number of health facilities providing quality HIV counseling and testing	59	99	144	ND	ND	233
▪ Number of health facilities providing quality HIV/AIDS care and treatment	32	40	65	ND	ND	141

- **Keys indicators** ⇔ Global Health Objectives ⇔ Direct Impact on Public Health
- NA: Not applicable
- ND: Not done

**Table IV. Comparison of the performance of Health Systems  
in Congo-BZV and Togo in 2011**

		Countries	
Key Performance indicators	Relation to health system function or objective	Congo-BZV	Togo
Total population	-	4.233.063	6.283.092
National Income per capita	National wealth	\$2.943	\$531
Total health spending expenditure	National financial support	3.4%	6%
Share of government spending allocated to health	National financial support	5%	15%
Government expenditure on health as a % Gross Domestic Product (average in African countries: 5%)	National financial support	1%	3%
Per capita total expenditure on health	National financial support	\$72 (\$90 in 2000)	\$41 (\$25 in 2000)
External resources for health as percent of total expenditure on health	External financial support	7% (4% in 2000)	13.5% (3% in 2000)
National Health Development Plan	Overview which states the vision, strategies and selected interventions for health development	2007 – 2011 Health policy is based on the development of primary care	2007 – 2011 Health policy is based on the development of primary care
Life expectancy at birth	Health status improvement	55 years (60 years in 1990)	59 years (54 in 1990)
Adult Mortality rate (per 100 000)	Health status improvement	385 (271 in 1990)	340 (389 in 1990)
Maternal mortality, ratio (modeled estimate, per 100,000 live births) MDG n5 target in 2015 : 115	Health improvement by reducing avoidable mortality	781 (460 in 1990)	350 (640 in 1990)
Under five mortality rate, per 100 000)	Health improvement by reducing	128	110

<b>MDG n°4 target in 2015: 35</b>	avoidable mortality	(104 in 1990)	(142 in 1990)
<b>Incidence of TB (per 100 000)</b> <b>MDG n°6 target in 2015: 104 (CNG)</b>	TB prevention and control How well the system prevents TB and its progression	<b>390</b>	<b>73</b>
<b>Estimated HIV prevalence rate - Ages (15-49) MDG n°6</b>	HIV prevention and control	<b>3.5%</b>	<b>3.2%</b>
<b>HIV incidence Estimated annual number of new Infections (All ages)</b>	HIV prevention and control of HIV transmission	<b>11 000</b>	<b>9.500</b>
<b>Estimated ART Coverage (%)</b>	HIV disease control and transmission	<b>44%</b>	<b>42%</b>
<b>Annual number of AIDS deaths</b>	HIV prevention and control	<b>8.500</b>	<b>7.700</b>
<b>Percentage of children immunized against DTP3 (Diphtheria, Tetanus and Polio)</b>	Disease prevention and health promotion among the young	<b>90%</b>	<b>92%</b>
<b>Notification of Polio cases at ages 0–30 years</b>	Public health - Primary care provision	<b>More than 600 cases - 250 deaths (young men 15-24)</b>	<b>0</b>
<b>Percentage of children immunized against Pentavalent vaccines (DPT-HepB- Hib)</b>	Disease prevention and health promotion among the young	<b>52%</b>	<b>89%</b>
<b>Notification of measles at ages 0–14 years</b>	Public health - Primary care provision	<b>1300 (150 deaths)</b>	<b>295 (0 death)</b>
<b>Prevalence of pediatric bacterial due to Haemophilus influenza) among children less than 5 years</b>	Disease prevention and health promotion among children	<b>65%</b>	<b>43%</b>

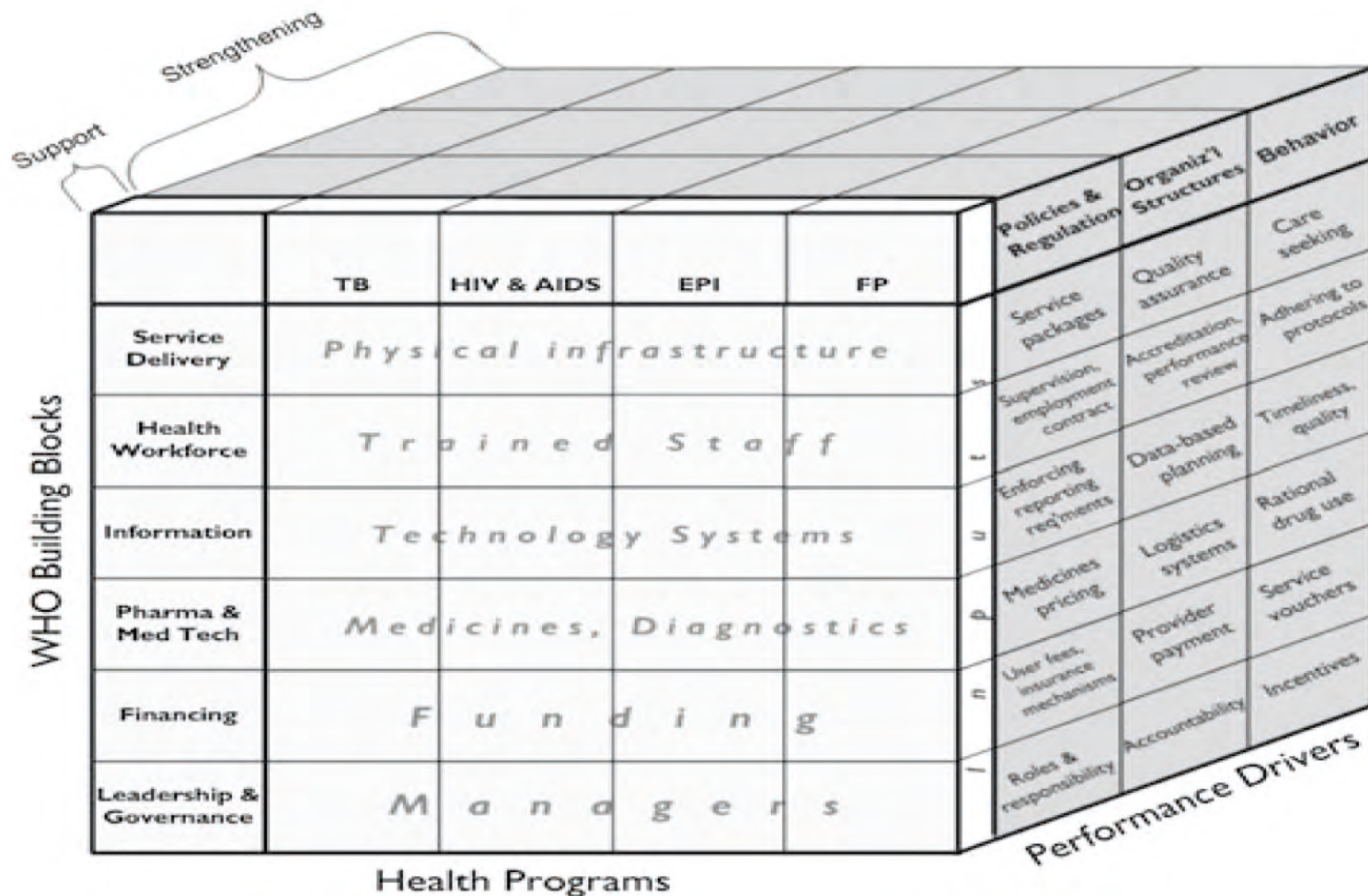


Figure 4: Health System architecture according to WHO

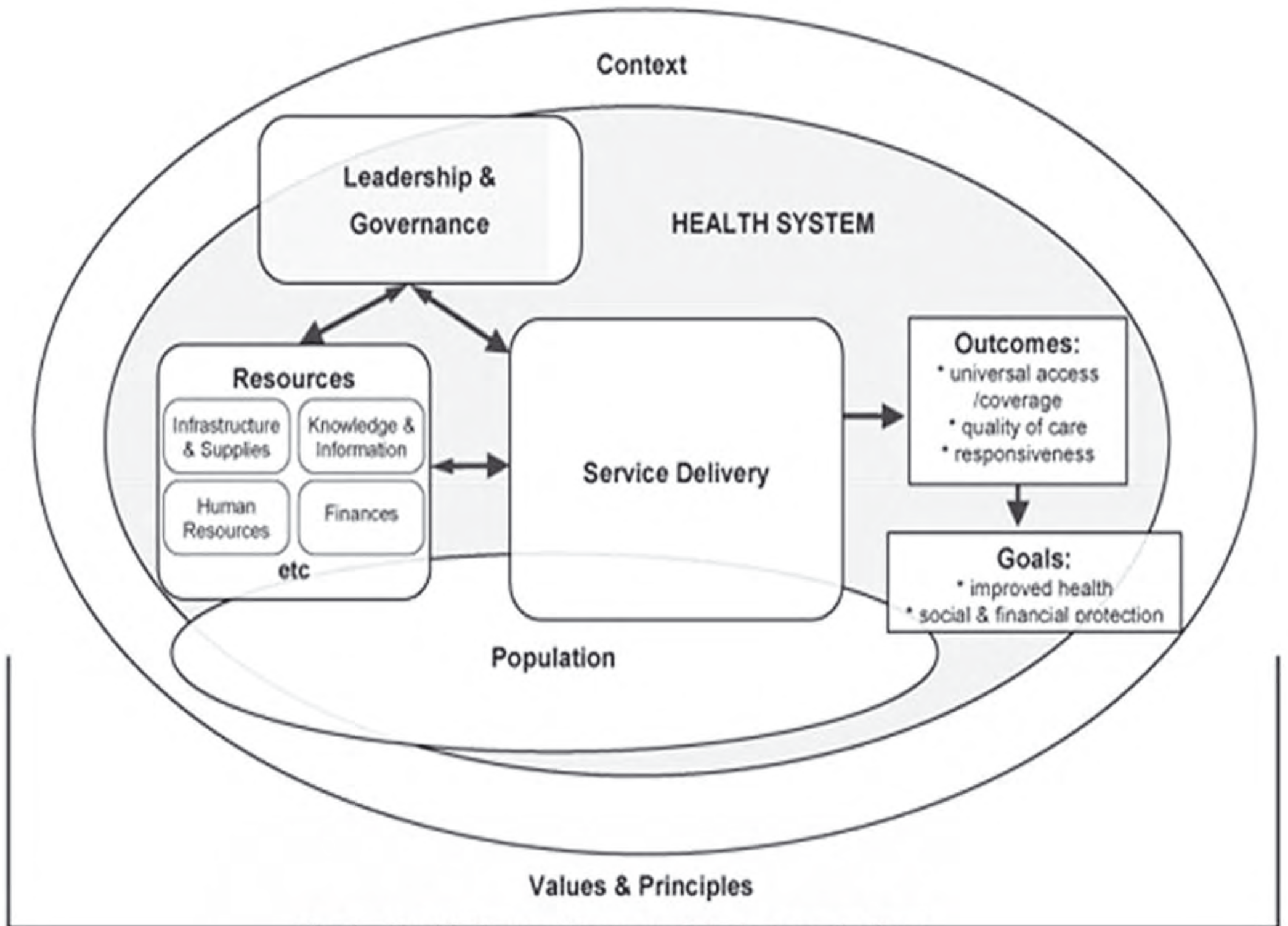


Fig 5 - Health System Framework in its generic form



## Framework for M&E of health systems strengthening

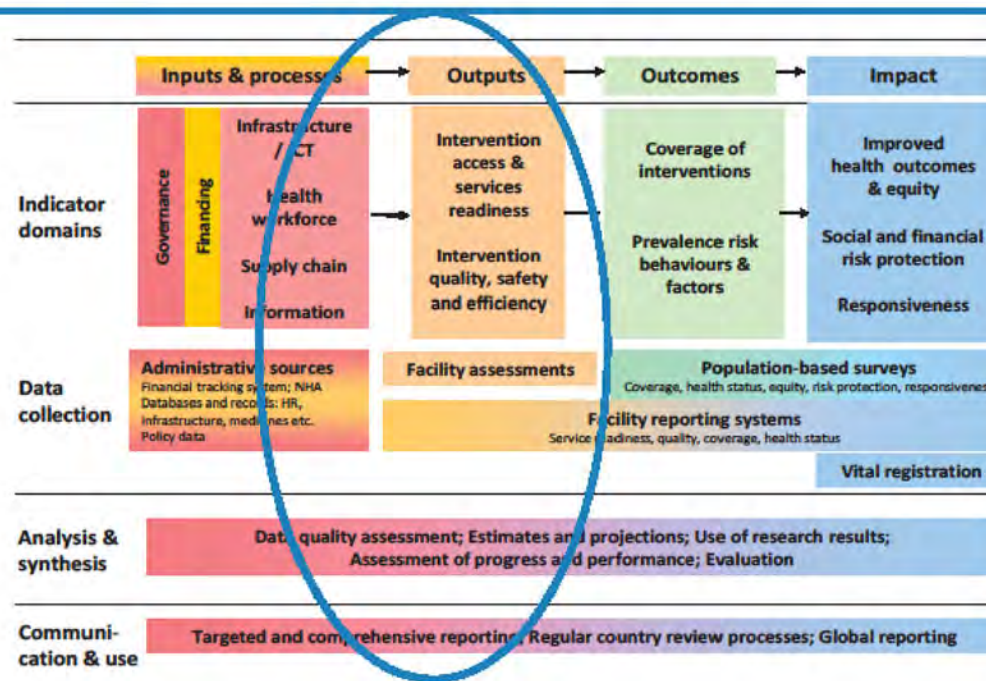


Fig 6 - Framework for M&E of HS Strengthening

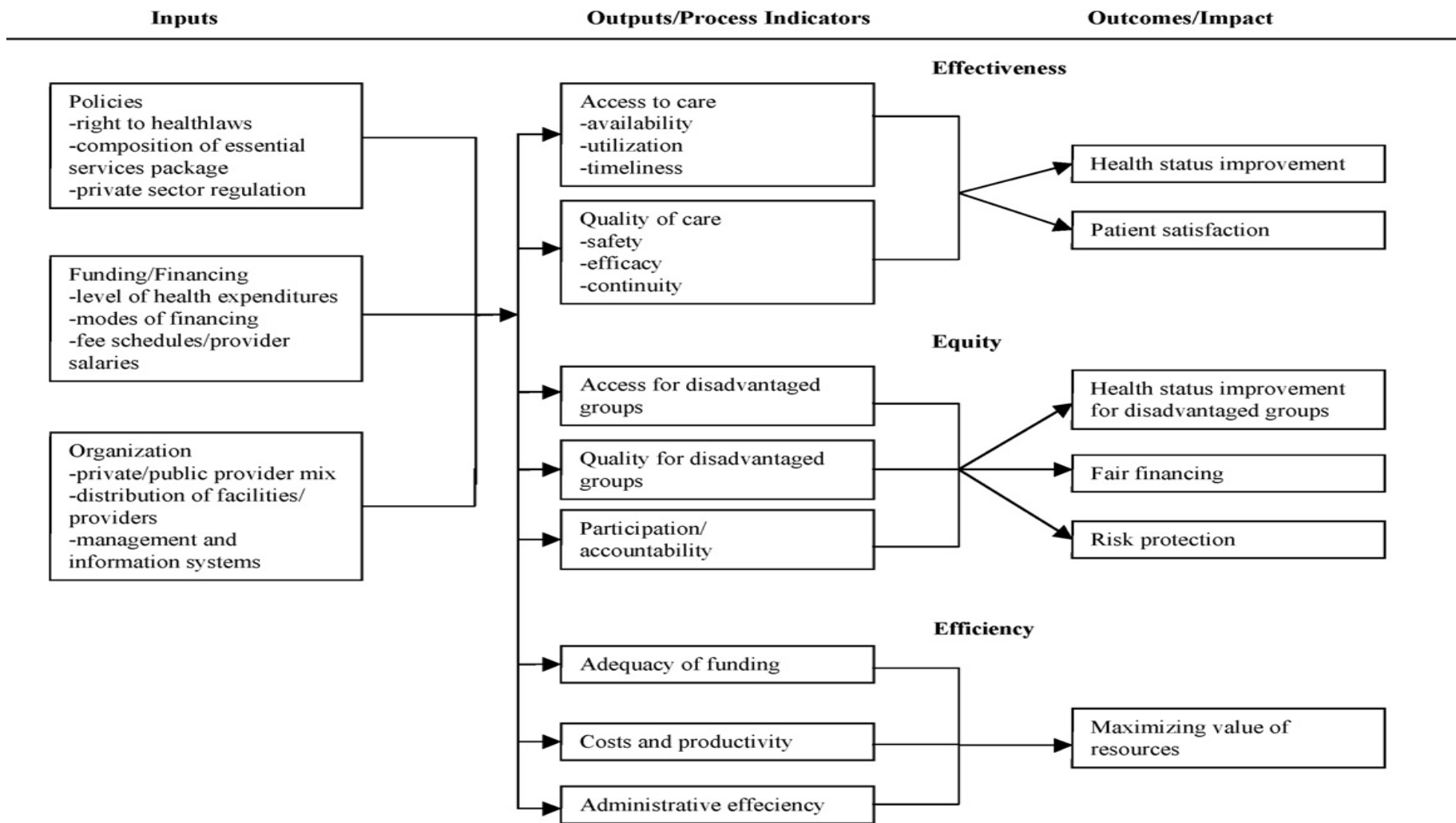


Figure 7: Process of evaluation of the performance of Health System

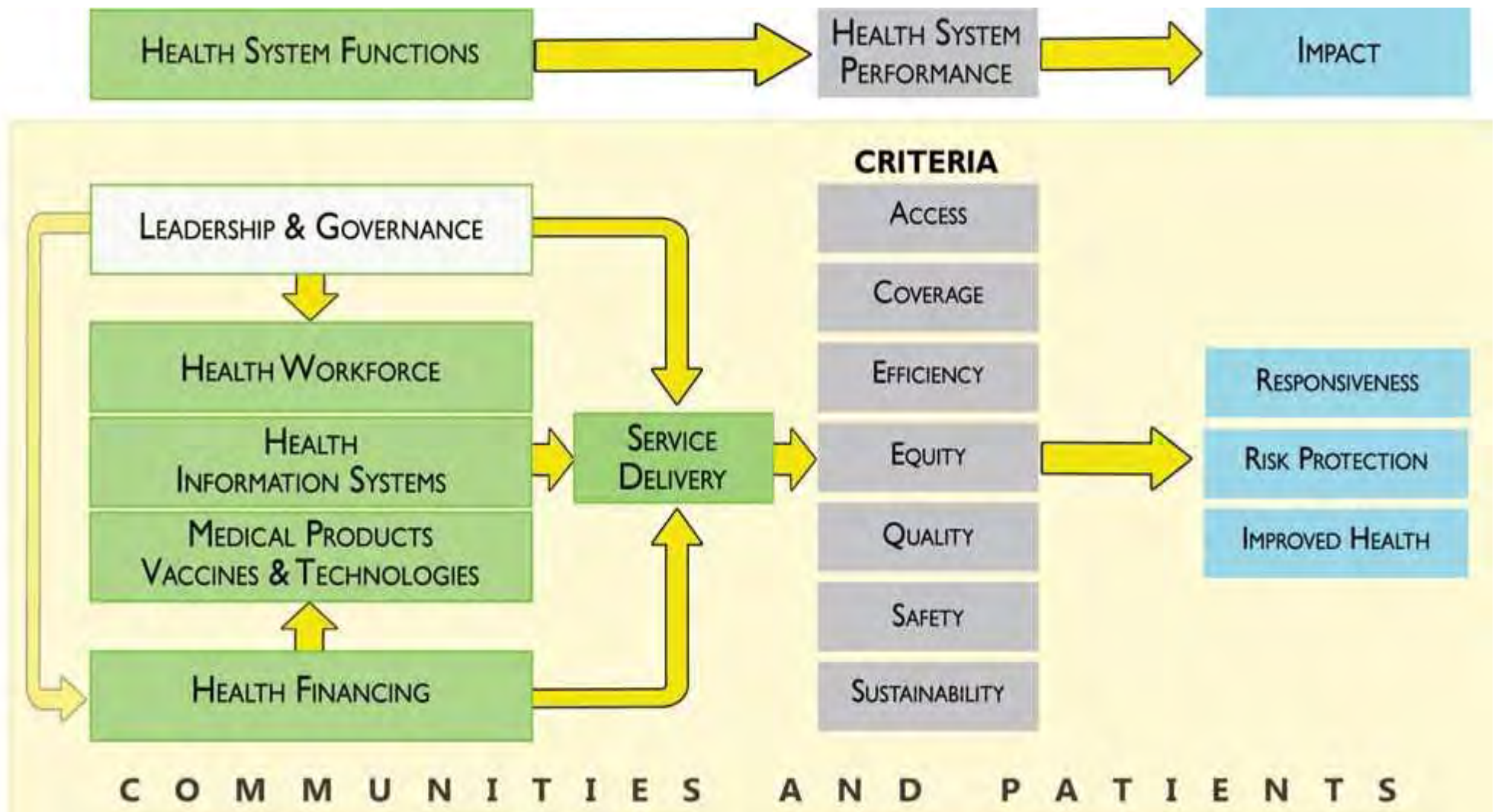


Fig 8: Relationships among the various health system actors



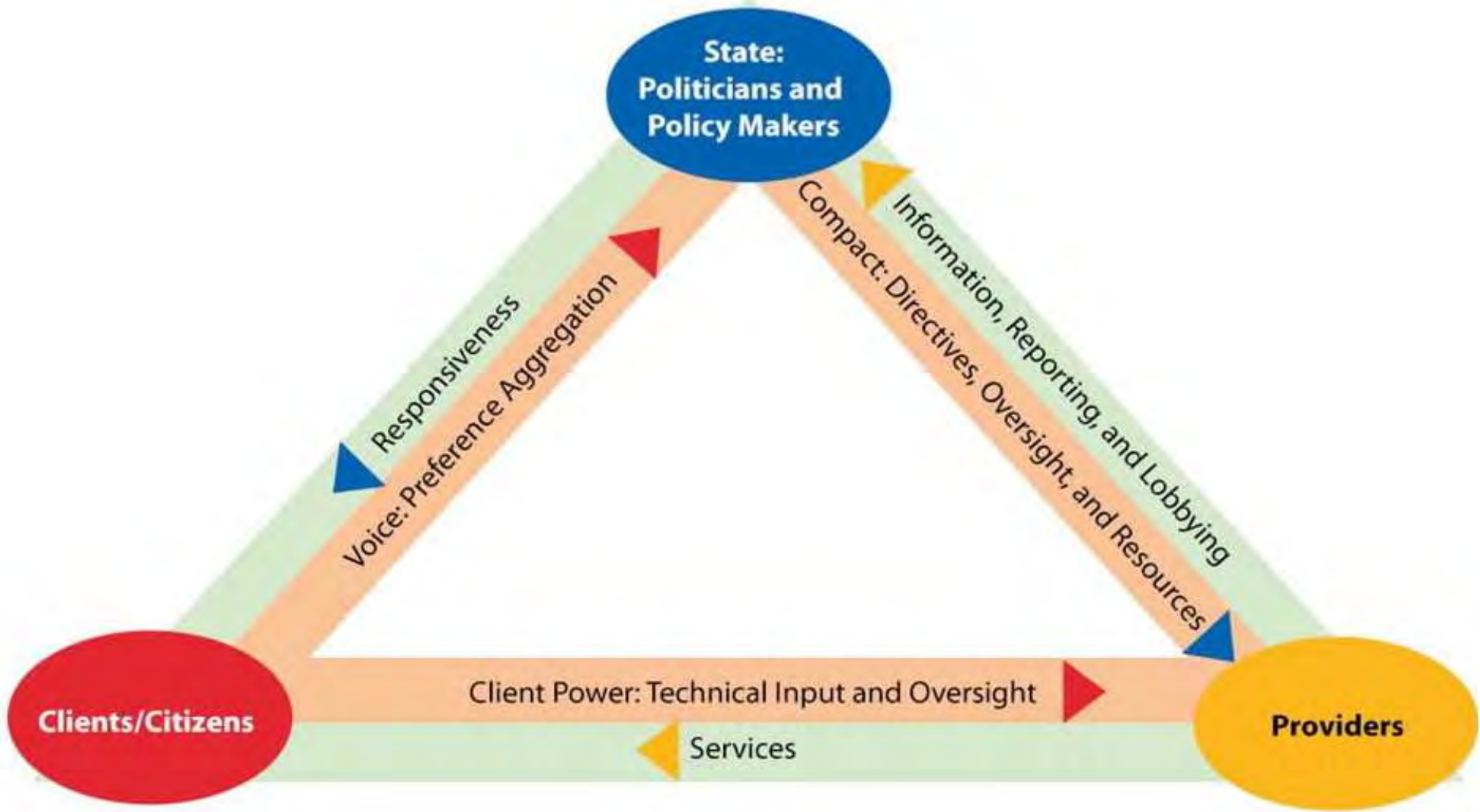


Figure 9: Three sets of actors involved in the health system

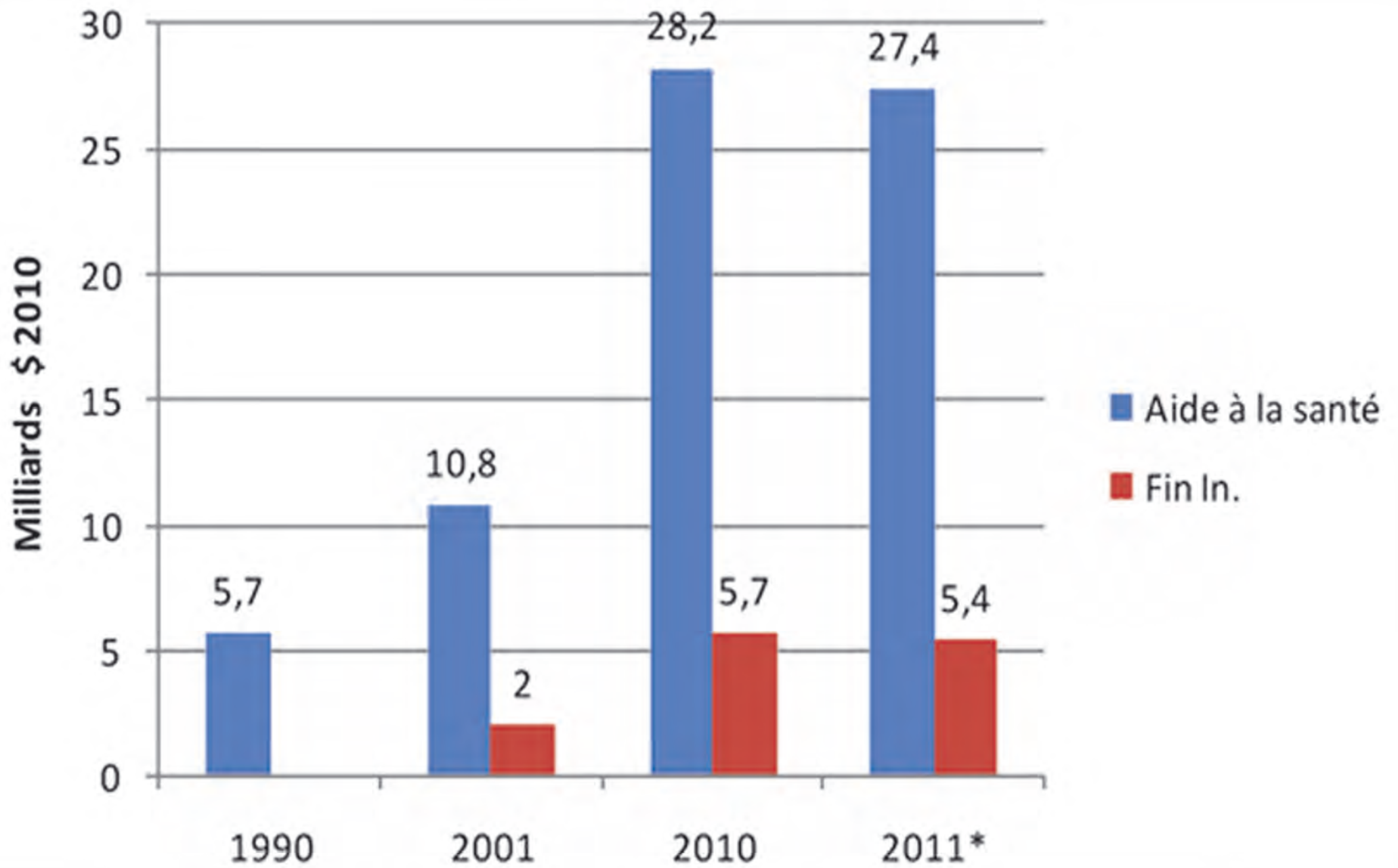


Fig 10 - Universal Coverage - Gap of financial resources

# Systems framework

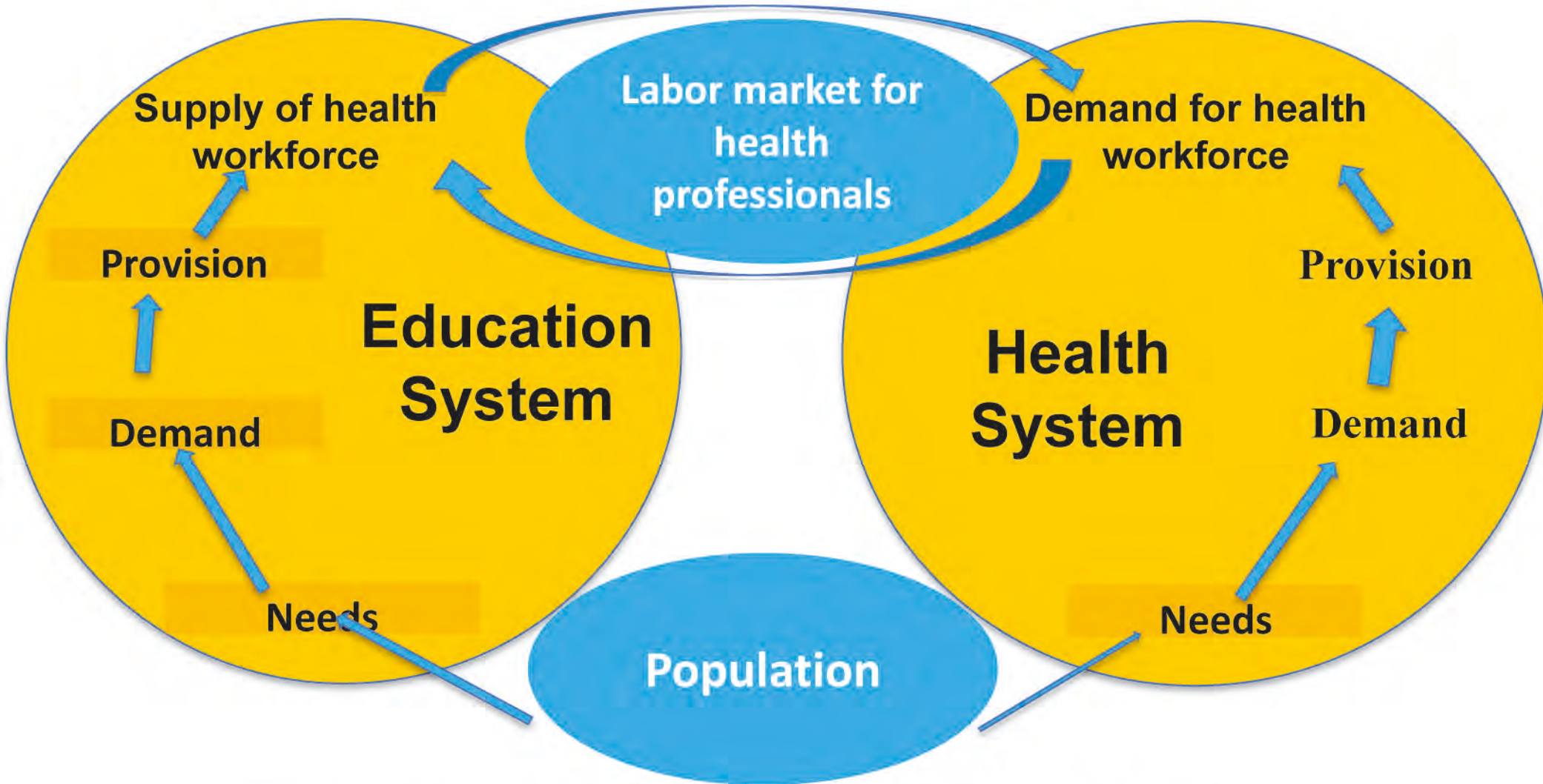


Fig 11 - New framework of education and health systems



# PUBLIC HEALTH INTELLIGENCE SKILLS

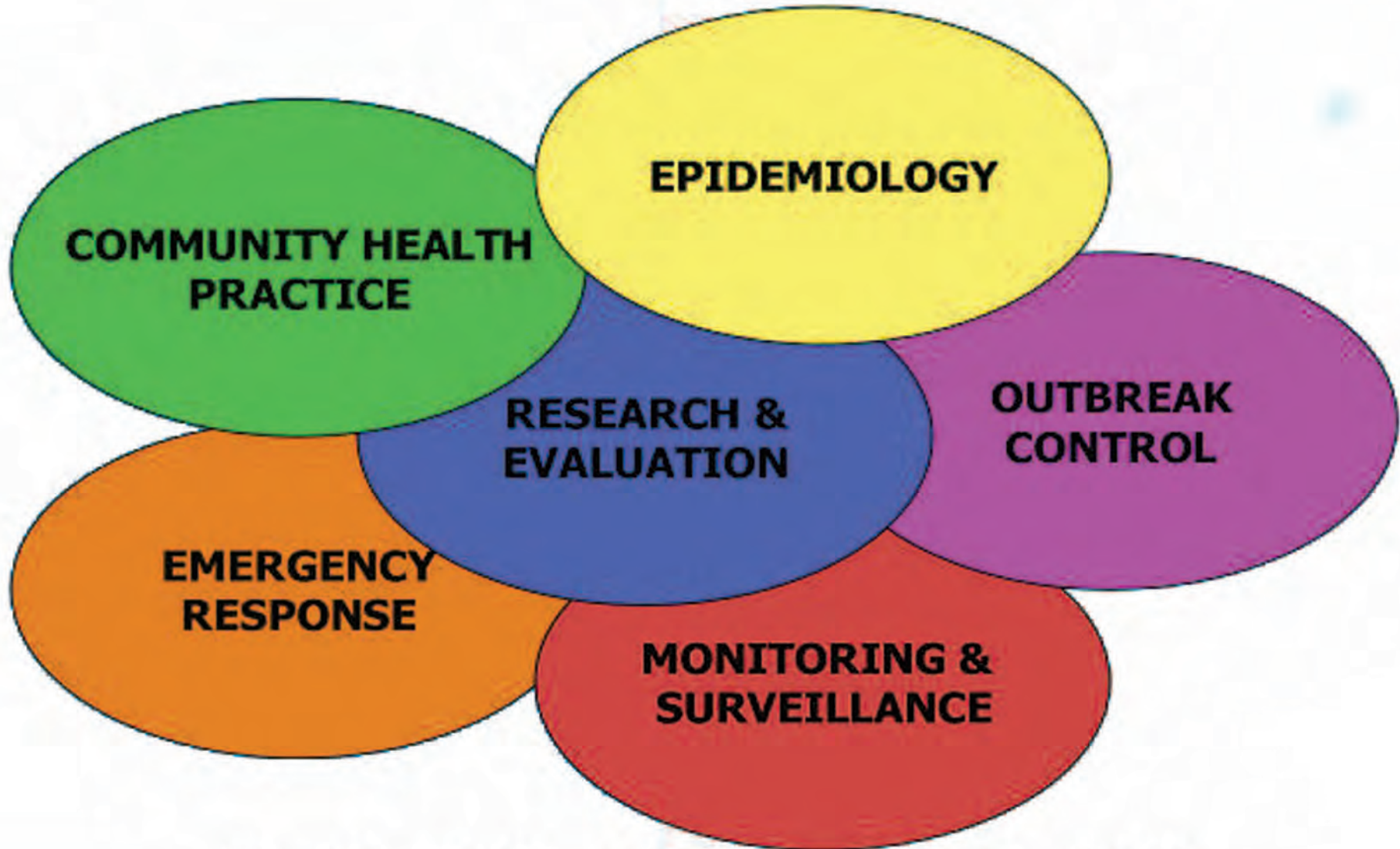


Fig 12 - Public Health Leadership Skills

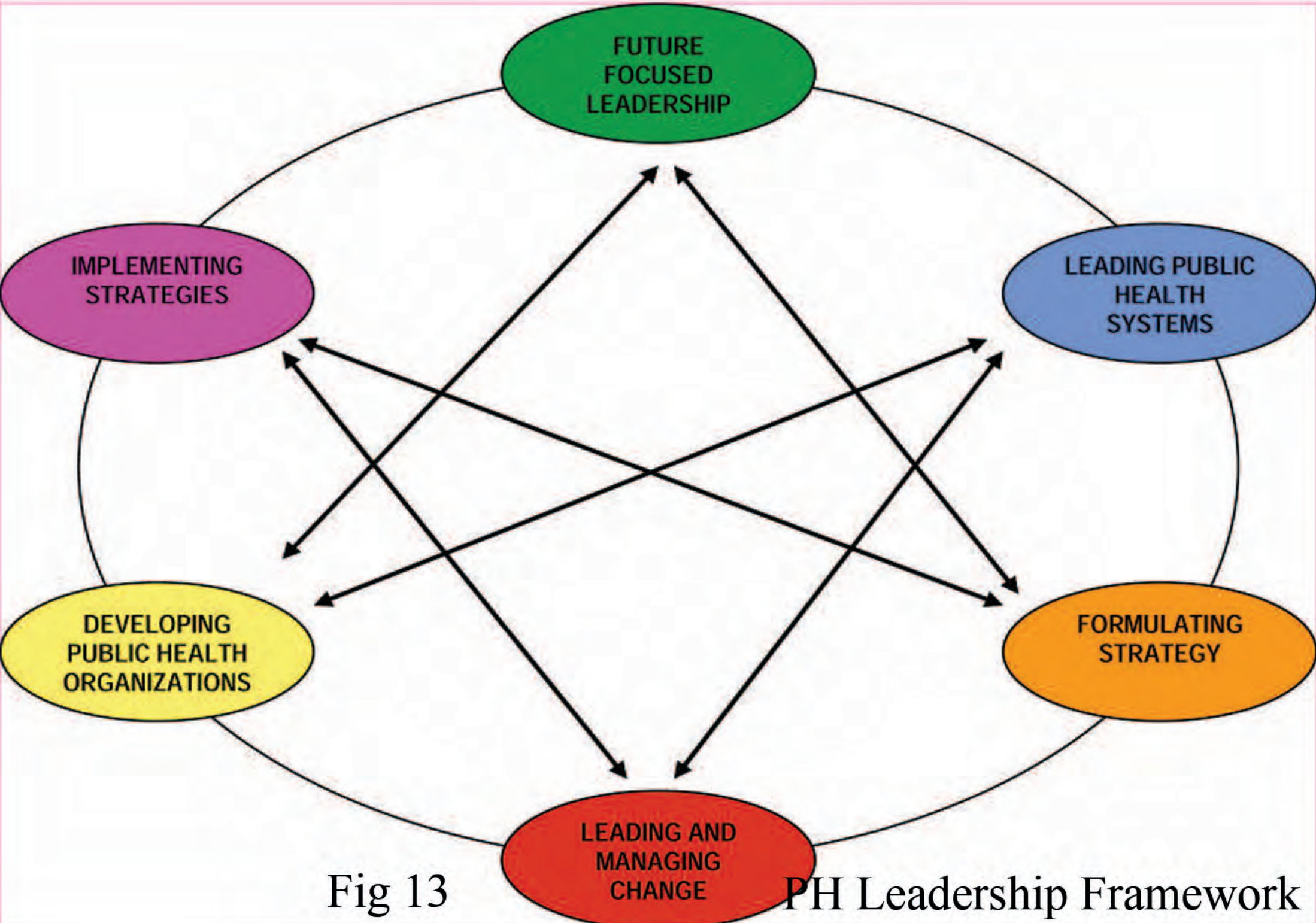


Fig 13

PH Leadership Framework





BIKANDOU

Blaise

September 2013

## EHMBA - Class of: 2012 - 2013

### **Interventions in targeted health sectors and the support of Health System in Sub-Saharan African countries** “The importance of commitment of the government, accountable governance, good leadership and management to improving Health System performance”

University partnership : ESCP Europe, LSE, Mailman School of Public Health

#### **Abstract :**

**Background:** Most of the countries in developing world, mainly those in Sub-Saharan Africa, are still facing huge issues in delivering basic essential health services to their populations. Although during the past decade, the unprecedented amounts of money have been invested in the health sector of these countries, it did not yield the expected return in terms of improved health outcomes. Intermediate evaluations reveal that some progress has been made but that many African countries are not on track to achieve the health MDGs by 2015. Among health systems' weaknesses, the insufficiency of political interest and commitment, lack of accountability governance and leadership in management are noteworthy. Although most of actors agree that strengthening the whole health system is the best way to deliver health services to people, in the reality, donors and funding agencies still prioritize and focus their assistance (financial and technical) on targeted health sectors through vertical instead of horizontal and broader interventions.

**Objective:** To contribute on the international debate on the effectiveness of support provided to health sector, and highlight the key role of interest and proactive commitment of local government, good health governance, leadership and management, to generate positive outcomes and strengthen the health system.

**Materials and Methods:** The study, focused on the performance of targeted and vertical health interventions, scans six core competencies of three health sectors. We carried out a comparative review of the organizational governance; leadership and management; technical expertise, resource mobilization and coordination capacities in 2005 versus 2011 in the blood transfusion system, vaccines and immunization and national AIDS councils in two Sub-Saharan African countries: Congo-Brazzaville (Central Africa) and Togo (West Africa). Although these selected countries are French-speaking areas, beyond their geographical distance, they also had some diversity in term of their socio-economical profiles, as well as the pattern of their public health system; both countries are facing the burden of communicable and non-communicable diseases. We employed two complementary approaches for data collection: a review of the literature and databases and interviews with senior institutional/organisational officials during a short sites visit.

**Results and comments:** In Togo, in spite of limited national financial resource (GDP \$531 for a population of 6 millions), stressed by the dramatic decrease of the international assistance due to the withdrawal of all of funding agencies consecutive to the political unrest and slaughters arisen during the year 2000's political uprising, most of key indicators show that the health status has been improved. Health spending reaches 6% of total public expenditure and 3% of GDP. In contrast, Congo, with substantial financial resources (GDP almost \$3000 for a population of 4 millions) and significant financial support from International donors (World Bank, Global Fund, GAVI, bilateral cooperation) shows a per capita total expenditure on health of \$72 (\$90 in 2000) whereas the average in the African region is around \$140. Worse, the health spending represent only 3.4% (1% of GDP) of total public expenditure whereas the average in Sub-Saharan African countries is around 7% (In 2001, in Abuja the recommendation was to reach 15%). This comparative analysis in these two countries highlights the difference in political vision, interest and proactive commitment, good and accountability health governance, leadership and management. Beyond the funding aspect which remains important point, these capacities are essential for improving the outcomes of health system and therefore generating the positives impacts on various communities throughout countries.

**Conclusion:** This study demonstrates that the positives outcomes of targeted health interventions through vertical projects are closely linked to political vision, interest and commitment, good governance and accountability, leadership and management. This may require more investment in building capacity, strategically focus on the human resource strengthening to forge the health system which should be flexible and resilient Congo-Brazzaville, Togo and other sub-Saharan African countries. The implementation of short-term recommendations may allow these countries to respond to their population's needs, face the challenges of communicable diseases and a rapid increasing of non-communicable

**Key words :** Congo-Brazzaville – Togo – Sub-Saharan Africa - Public Health - Vertical Intervention – Blood Transfusion – Vaccines & Immunization – National Council against HIV/AIDS – Governance – Leadership – Management – Health System Strengthening