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Africa and its Demographic Challenges: an Uncertain Future

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Foreword

This Working Paper is the executive summary of a collective publication: *Africa and its Demographic Challenges: an Uncertain Future*, edited by Benoît Ferry¹. This study was born out of a workshop on demography and population issues organized in early March 2006 by the *Agence Française de Développement* (AFD) in partnership with the United Kingdom's Department for International Development (DFID), the Flora Hewlett Foundation and the French *Équilibres & Populations* association. Given that population issues seem to have been forgotten, or at least put on the backburner of international agendas since the 1994 International Conference on Population and Development (ICPD) in Cairo, this workshop's initiators had a threefold objective:

- to resituate the demography issue, particularly in Sub-Saharan Africa, at the center of the debate on the structural factors of growth and development (or, to put it more negatively, on the fundamental causes of the failure of policies aimed at combating poverty in certain countries);
- to highlight the failure of the contraceptive revolution of the last thirty years on the African continent and to contrast the various viewpoints on the issue: researchers from the South and the North, academics in the French and English-speaking worlds, economists, sociologists and demographers;
- to reignite renewed dialogue between the research world and development actors on the complex relationships between demographic, economic and political problems.

The workshop's organization was based on renewed determination to bridge the gap that too often still separates scientists in research institutes from workers in the field. This is an essential step in better understanding the successes and failures of certain public policies, including

those recommended with the best of intentions by some bilateral and multilateral donors, but whose desired short-term effects seldom take contextual or historical determinants into account. We need only take the example of the Millennium Development Goals (MDGs). Since the New York Summit in September 2000, they have become the alpha and omega of international action for development. According to François Egil, they are "a new millenium project"², yet their universality has no regard for the specific characteristics of countries or their point of departure. The weight of the demographic variable - which is set to triple or quadruple by 2050 in countries like Niger, Mali or Chad - will require massive efforts to achieve the MDGs and to ensure universal enrolment, for example. For Africa, in particular, this means going from 64 million children with primary education today to 160 million in 2015. Consequently, new financial resources have to be mobilized, but it is even more important to integrate a dynamic and forward-looking system of school management (with heavy investment in real estate, massive recruitment of teachers, etc.) and to provide a real strategy for strengthening national capacities.

The very fact that collaboration on the demographic issue is taking place is both exemplary and much needed. There are several reasons for the international disinterest in these issues since the 1994 ICPD and they point out how important it is to return to them if Africa is not to continue lagging behind in development.

¹ Benoît Ferry (ed.) (2007), *L'Afrique face à ses défis démographiques. Un avenir incertain*, AFD, CEPED, Karthala, Paris.

² François Egil (2005), "Les éléphants de papier. Réflexions impies pour le Ve anniversaire des Objectifs de Développement du Millénaire" ("Paper Tigers. Impious Thoughts on the 5th Anniversary of the Millennium Development Goals"), *Politique africaine*, vol.99, pp. 97-115.

First of all, the stabilization of world population and the acceleration of demographic transition have evaded the gloomy predictions of the Club of Rome³ and have enabled a few developing countries, including the most populated (China, India, Thailand, etc.) to stunt their growth. In addition, the “demographic bonus” from which those countries benefited (the sudden fall in fertility during the transition phase, leading to an increase in the active part of the population and a decline in the inactive part), has greatly facilitated their emergence in international economic relations (production and consumption) so that they have now become full-fledged actors in globalization. Nevertheless, the success of this world demographic transition has had drawbacks: it conceals, overshadows or minimizes the African discrepancy, particularly in West and Central Africa. High African fertility has been spurred on by the combination of two sometimes unconscious and contradictory ideologies: one, inspired by nationalism, which sees population size as synonymous with power (the essential objective for Africa being to resume the relative position it held in the world before the slave trade and the period of colonial exploitation); the other, rooted in what we would call the Antimalthusianism of some former colonial powers (France, Portugal, etc.), according to which demographic growth is above all else a benefit. If we exclude Tunisia, few African heads of state have been able to escape the Manichean trap and the stranglehold of these two ways of thinking. Nor have they been able to protect the interests of their own people or allow women to have access to family planning (today, more than 130 million of them still have no access to modern contraceptive methods) or to medical follow-up for pregnancies. We can only be horrified by the following statistic: an African woman is two hundred times more likely to die during childbirth than a Western woman.

Secondly, the 1980s debt crisis and the implementation of structural adjustment policies led to short-term problems being prioritized, with the immediate goal of cleaning up public finances, reducing public spending and completely liberalizing economies (according to the then current catechism of international financial institutions, formalized by John Williamson in a series of principles that have become famous under the name of the “Washington Consensus”). In fact, these structural adjustment policies have largely led to enriching ruling classes (often the frontline beneficiaries

of privatization policies) and the complete breakdown of social structures in countries lacking political maturity. They also had the effect of limiting already implemented actions in favor of birth-control policies and, in many countries, halted progress made in reducing maternal and infant mortality. Moreover, the negative effects of what the United Nations Development Program (UNDP) has qualified as “a lost decade of development” have proved to be long-term. Weakened states, incapable of providing any service to their populations or of attracting non-clannish or non-mafia skills, consequently find themselves completely delegitimized when trying to elaborate public policies. Another of the harmful consequences of structural adjustment policies has been that they reinforce the primacy of the economic analysis in development while “overlooking a number of other dimensions (strategic, political, cultural, ethical...)”.⁴ In this respect, it is striking to note that the widely practiced research trend on aid effectiveness and on the optimal conditions for its allocation (a trend which has been developing since the late 1990s in the wake of researchers and economists linked to the World Bank, such as Burnside, Dollar, Collier, etc.) is completely paralyzing the implementation of demographic policies. The World Bank’s African Vice-Presidency currently has only one meager demographer on staff.

Thirdly, the emergence of new global challenges related to the environment (global warming) or health (HIV/AIDS and now Avian Flu) has mobilized international action on new playing fields, while population issues are apparently no longer so pressing on a global level. Although there is an obvious link between population and environmental issues, it is rarely made at the international level, despite the fact that excessive population densities can have lasting adverse impacts on ecosystems: deforestation, impoverishment of biodiversity and unregulated natural resource exploitation. Even though migration is sometimes quoted as being a regulatory factor, it can only be marginal in this context (for the part of the population which has to migrate will always remain small in the countries concerned, while the

³ Meadows Report (1972), “Limits to Growth”.

⁴ Jean-Michel Severino and Olivier Chamois (2005), “État des lieux des politiques de développement : les mutations imprévisibles” (“Inventory of Development Policies: Sudden Mutations”), *Afrique contemporaine*, No. 213, Winter.

capacity of receiving countries remains limited). It has sparked a shift of imbalances or the creation of new ones: anarchic and unmanageable urban growth, the exacerbation of conflicts surrounding land ownership between the indigenous and foreign-born population, the appearance of illegal emigration channels into countries in the North, among others.

If action in the fight against HIV/AIDS is analysed more precisely, it emerges that, in Africa, it rightly benefited from priority support from donors, but to the detriment of more wide-reaching healthcare programs, and even sometimes of the general balance of healthcare systems. Although we cannot deny that it was an attempt to avoid a total humanitarian catastrophe, particularly in the countries of Southern Africa where the prevalence of HIV/AIDS has exceeded 30% (as in Botswana, Zimbabwe, Swaziland or Lesotho), to the extent of grossly distorting the age pyramids and creating new social problems (the traumatic issue of HIV/AIDS orphans obviously comes to mind). However, we must also examine how this action has been adapted to countries less affected by the disease, like Senegal or the Sahel countries, where prevalence does not go above 1% and should not particularly increase in the years to come. In a study on aid allocation by priority areas⁵, the OECD points out that HIV/AIDS is receiving more resources than is justified by its actual impact on morbidity and mortality. Of course, this does not mean opposing the two priorities - the fight against HIV/AIDS on the one hand and family planning on the other - but one can ask whether the latter would not be better seen by populations, women in particular.

Fourth and last, however improbable it may seem, the alliance between the fundamentalist Christians and Muslims (in the United States and Iran, for example) in favor of limiting women's rights and of opposing contraceptive programs, has certainly substantially contributed to "neutralizing" the demographic problem in international conferences. The priorities announced by donors (with the exception of the unwavering Netherlands and some bilateral donors from Scandinavia) have been weakened. France has often found itself isolated when defending individual rights, which have been severely threatened in this ideological maelstrom. Even though the 1994 ICPD in Cairo emphatically reaffirmed a certain number of rights concerning "reproductive health", these were not specifically resta-

ted in the 2000 Millennium Summit, even though the MDGs obviously renewed commitments to fighting against maternal and infant mortality, large pandemics (HIV/AIDS, tuberculosis and malaria) and inequality between the sexes. Readers should also remember that the American voluntary contribution to the United Nations Funds for Population (UNFPA) was abruptly cut just after President Bush's election in 2000 under the official pretext that it lacked support, however indirect, for birth control programs in China. In addition, Paul Wolfowitz, during his short stay at the head of the World Bank, opposed the bank's approval of a family planning program in Madagascar.

However, this lack of interest in population issues is not sustainable in the medium and long term, something Jean-Marie Bockel, Secretary of State for Cooperation and Francophony, stressed on July 17⁶, adding that a large part of Africa's economic growth is automatically absorbed by the demographic increase. His statement was clear: "It is growth without development". The stakes are too great to be neglected in Sub-Saharan Africa where transition and demographic trends are atypical. 5% of the world's population lives in about twenty countries where fertility is greater than 6 children per woman. Although a highly relative drop in the continent's fertility rate has been noticed (5.4 children per woman in 2002 versus 6.7 in 1985), demographic growth projections are unsustainable in the long term, since they range from doubling to quintupling, depending on the country (with the exception of South Africa). The record fertility of a country like Niger (7 children per woman) remains lower than the desire for children, which is 8 children for women and 12 for men!

These trends put off to a distant future the dividends of the demographic transition experienced by other parts of the world (a transition that has often been the corollary to economic take-off, as in Tunisia or Mexico). Furthermore, for the poorest countries, they also raise certain insurmountable problems in terms of arable land and agricultural resources management (in Niger, the ratio of population to cultivable land is today six times higher than it was when

⁵ OCDE, 2005, Working Paper, No. 244, June.

⁶ In his opening speech at the International Cooperation and Development Days. The entire text is available at: www.diplomatie.gouv.fr.

independence was declared in 1960), water supply, school and healthcare center construction, the fight against poverty and social inequalities (since statistically the poor have more children, they are relatively more numerous). Consequences of this demographic growth include the probable increase in food shortages and famines (particularly in the Sahel and the Horn of Africa), the development of both rural (for land ownership and exploitation) and urban (with the massive presence of unemployed youth) conflicts and, of course, the rise of increasingly uncontrollable migratory flows towards urban areas and richer regions, and finally towards Europe, in a movement of communicating vessels. All development efforts and the success achieved here and there (such as the success of the cotton industry in French West Africa) may be undone if no new efforts are made.

Before acting, we obviously need to better understand the phenomena at stake and the dynamics within which they are being played out. Only by solidly grasping the reality (and that is really the true purpose of the project launched in March 2006 by the different partners in this initiative) can an effective influence be exerted on the kinds of policies to be implemented. We must, as Ruth Levine, Director of Programs for the Center for Global Development, neatly and clearly puts it, “shed more light where there is only a glimmer”⁷. The first priority is therefore to revive research programs and projects in order to better understand present demographic trends and to better explain their economic and social determinants. In this regard, France has an outstanding research institution, the *Centre Population et Développement* (CEPED), whose work deserves to be promoted nationally (a goal of this publication) and internationally, considering its real ability to mobilize African scientific expertise, which has suffered a great deal from the collapse of funding allocated to them in both French-speaking and English-speaking countries. Because they lack viable statistical information (this applies to the economic sector just as much as to the demographic one), governments and donors make up imaginary worlds that are increasingly removed from the objective reality. You do not have to go to Second Life to discover new worlds: reading some international organizations’ reports, including those reputed to be the most serious such as the Bretton Woods Institutions, will do just as well!

It must also be pointed out that since 1998, AFD, a bilateral operator and the mainspring of French public aid for development, is running many projects in the healthcare sector and even more in the educational one, the development of which necessarily depends on a very subtle understanding of the demographic development of the countries in question. In education, AFD is prioritizing the fight against poverty and inequalities by promoting access to quality education for all. The improvement in girls’ enrolment rates in particular should help improve living conditions, optimize human resources and, eventually, lead to demographic transition. As for improving infant healthcare services, AFD aims to strengthen healthcare systems as a whole via global interventions using either support for specific areas or broad-reaching projects. In addition, it brings more regular support to certain target countries in the technical aspects of vaccination policy. In the area of maternal health, the priorities translate into projects dealing with both supply and demand for quality healthcare, particularly by improving financial, social and cultural accessibility to reproductive health services. The intended impact is threefold: improve women’s rights (particularly concerning their sexuality), reduce maternal mortality and morbidity, and regulate population growth.

If its multilateral commitment is also taken into account (particularly in the financing of The Global Fund to fight AIDS, tuberculosis and malaria), France’s efforts have focused more globally on the fight against HIV/AIDS and contagious diseases (the sixth of the eight MDGs). This heavy mobilization reflects a long-standing commitment, at the highest political levels to provide access to medicines for the sick within developing countries. Thus France has played a key role in getting the G8 to recognize the need for global action combining prevention, detection, access to medicine and healthcare and to community management. On the other hand, France has been less involved in the MDGs for reducing infant and maternal mortality. In response to this, the recent strategic orientations of French aid aim to significantly increase France’s interventions in those

⁷ *Équilibres & Populations*, 2006, *Newsletter*, No. 97-98, January-June.

areas, in particular through integrated support for childhood diseases (mainly via vaccination) and by improving reproductive health, pregnancy follow-up and the conditions for giving birth.

Based on the conclusions reached by this publication's research, revamping a broad action plan needs to occur. It should be elaborated around the following areas:

- taking into account, in all sector-based policies (education, health, rural development, urban development, the environment, etc.), the demographic challenge so as to better define populations' needs, on the one hand, and on the other, to act early to promote awareness. In effect, it is crucial for population issues, as for all other development issues, that recipient countries appropriate the implemented policies. If a local participant is not convinced of a program's relevance, it has very little hope of succeeding, hence the importance that local specificities (culture, religion, gender, promotion of thematic knowledge, etc.) be taken into account. This also relates to the concern, which is not necessarily systematic, of promoting certain methods, experienced as being imposed from the outside (repeating the "success stories" of some, often creates the nightmares of others), but to create a debate around them;
- reaffirming the belief that access to reproductive health is a right of all men and particularly of all women. Again, the aim here is not to force African families to have fewer children, but to give them the possibility of choosing the number of children they have, in conditions that do not endanger the life of the mother. All studies show that reducing the number of pregnancies in a woman's lifetime can improve maternal health and reduce infant mortality;
- developing, particularly in West and Central Africa, healthcare programs that do not exclusively focus on the problem of HIV/AIDS (without of course forgetting it), but that also address, via an integrated approach, other

causes of infant mortality (malaria, diarrheic diseases, respiratory infections, etc.);

- choosing an approach, which is more crucial than ever, based on strengthening healthcare systems and integrating reproductive health, infant and maternal healthcare, the fight against HIV/AIDS and general healthcare into a common framework. Bilateral cooperation through technical assistance and capacity reinforcement programs has a fundamental and unique role, which effectively complements the actions of so-called vertical funds (like The Global Fund to fight AIDS, tuberculosis and malaria).

This commitment taken by all French cooperation, supported by research institutes and centers such as CEPED, INED or IRD, must be continued in the years to come. The most recent speeches by key leaders in France testify to a genuine awareness of the issues discussed here. "The [demographic] challenge is therefore huge and each and every one of us must understand its full extent", stressed the Secretary of State for Cooperation and Francophony, Jean-Marie Bockel⁸. As put by AFD's Director-General, Jean-Michel Severino during the workshop that was the springboard of this publication, the demographic issue is "a crucial area for the future of Africa [...] that is profoundly tied to all development aid and support policies for Africa." It would also be useful that actions take place at the European level with the main donors involved – the Germans, the British and the Dutch, in particular, whose analyses often mirror our own—in order to guarantee strong and sustainable actions in these areas. Finally, the European Commission, via its cooperation agency Europe Aid, has a key role to play in this area, a role it has not always assumed. The issues at stake are crucial. The aid agencies' commitment must be unwavering in order to effectively support the efforts of partner countries.

Jean-Marc Châtaigner

⁸ Speech during the International Cooperation and Development Days, cf. footnote 5.

Executive Summary: Demography, Reproductive Health and Development in Sub-Saharan Africa

Between a Contrasted Present and an Uncertain Future

According to United Nations population projections published in 2007, the world's population is expected to increase by 50% in the next fifty years, rising from 6.1 billion in 2000 to 9.2 billion in 2050. During this same period, the population of Sub-Saharan Africa could be multiplied by 2.6, rising from 680 million in 2000 to 1,760 billion in 2050 (United Nations, 2007a). Should we still be sticking to the hypothesis that worldwide demographic patterns are leveling out and that mortality and fertility rates in African countries are dropping off? Given the recent trends in some of these countries, the answer is probably no. In effect, figures show that population growth in Africa remains exceptionally high. The demographic situation in Sub-Saharan Africa has been further complicated by the emergence of HIV/AIDS, and some countries are now even witnessing a rise in mortality as well as reversals in the trend of falling fertility previously thought to be irreversible and permanent. In fact, no matter which demographic forecast we use one thing is sure: population growth in Sub-Saharan Africa will be one of the critical issues of the 21st century due to the expected demographic impact of its upcoming child-bearing generations (United Nations, 2007b). The future of the region hence greatly depends on the effect this demographic growth will have on economic and social development, and on populations' living conditions.

The economic performance of a country depends on a variety of factors that are complex and deeply rooted in the past. One factor, which interacts with a host of others, is demographic behavior. In the modern era, during the early stages of demographic transition, the development of European countries was galvanized by population growth. This growth, however, was relatively moderate and well managed by these countries (which are rich today), thanks to changes in mentality and social structures, the imple-

mentation of adequate policies and adapted institutions (Demeny and McNicoll, 2006), and also massive overseas emigration (Chesnais, 1986). Unlike this development model, Sub-Saharan Africa has not experienced any real economic take-off. This region has been unable to use its demographic growth to foster economic growth, in spite of its considerable assets: human resources, rich mineral resources as well as agricultural and forest resources. Unfortunately, these are most often poorly exploited or undeveloped.

Unlike emerging Asian and South American countries, many Sub-Saharan African countries are still experiencing weak economic growth and an uncontrolled population boom. Most have yet to put themselves firmly on the path towards development and hence remain on the margins of the ongoing globalization movement. Although there were encouraging signs of progress during the decade after independence, per capita income in this region has barely increased since the 1970s⁹. While the recent economic improvements have led some institutions like the United Nations Economic Commission for Africa and the African Union to more optimistic conclusions, major factors of instability persist: oil revenue dependence in most countries with strong growth, high occurrence of political instability and military conflicts, ineffectiveness of public authorities, among others. In fact, recent cases of GNP rise should be taken with a grain of salt as this indicator is far from perfect. For some countries, such a rise might simply result from an

⁹ Thirty years ago, average per capita income in Sub-Saharan Africa was twice that of East Asia. Today, it is well below half. This downward trend is comparable with the world's other developing regions.

increase in oil or mining revenues, or a good harvest due to improved climate conditions. Moreover, questions of income inequalities, living standards, national wealth, or social conflict do not figure into the picture painted by GDP levels, an indicator that also overlooks mineral resource depletion, a booming black market, and, the informal sector, which often generates more of the GNP than the formal sector. Put simply, while an increase in per capita income may indicate short-term economic growth, it is not necessarily indicative of sustainable development, which is the key element to ensuring better living conditions for populations and upcoming generations in a foreseeable future.

The question still remains as to whether or not present achievements are enough to effectively curb poverty. In 2004, only six countries reached the growth rate of at least 7% required to achieve the First Millennium Development Goal (cut poverty in half by 2015): Chad, Equatorial Guinea, Liberia, Ethiopia, Angola and Mozambique. Among these six countries, only Chad, Equatorial Guinea and Mozambique have maintained such a growth rate since 2001, and Angola since 2002 (CEA, 2005). While the proportion of the Sub-Sahara African population living in extreme poverty (with less than one dollar a day), has changed little between 1990 and 2002 (from 44.6% to 44%), the actual number of people living in such poverty has risen by 140 million (United Nations, 2006a).

In addition to the overall economic marginalization of Sub-Saharan Africa, there are some striking inequalities between the countries and these tend to worsen with globalization. Those countries that have been experiencing sustained growth since their independence with a more or less stable and functional democracy, good governance and a sense of national identity over the years, are in a better position to assume a role in the international economy and to take full advantage of public development assistance and changing technologies (Botswana, Mauritius, Ghana, Benin and South Africa). Inversely, among countries with weak, stagnate or negative GNP growth since independence, many have endured civil wars or political instability leaving them with highly ineffective public infrastructures, health-care services and educational facilities, which are sometimes even completely lacking in parts of the country (Ivory Coast,

Nigeria and the Congo, without overlooking countries that have remained failed states for many years now, as is the case of the Democratic Republic of the Congo and Somalia). All these countries have limited means to exploit the opportunities offered by globalization and often have to face its negative consequences such as drug and arms trafficking, and the black market which operates outside of state control. In an increasingly globalized economy, virtuous cycles have become full-blown vicious circles. If countries of Sub-Sahara African are to curb this trend in the future, they will need to boost their capacity to obtain and manage investments, as well as development and humanitarian assistance from the outside world (Clapham, 2006; National Intelligence Council, 2005)¹⁰.

Not only is Sub-Saharan Africa the least advanced region in terms of development, it is also the most behind in terms of demographic transition. From an economic and social standpoint, Sub-Saharan Africa had the lowest per capita income of all the major developing regions in 2004: US\$1,946 (in purchasing power parity), or, two-thirds of that of South Asia (US\$3,072), the next least endowed region. Its human development index is 0.472 versus 0.599 for South Asia. In the area of education, Sub-Saharan Africa is virtually at a tie with South Asia: 63% literacy rate among adults versus 61% in the latter, but the region is still well behind Arab countries (70%) and even farther behind East Asian and South American countries (90%) (UNDP, 2006).

In terms of demography, annual population growth in Sub-Saharan Africa has been and will remain the highest in the world. United Nations estimates indicate a growth rate of at least 2.5% per year between the 1960-1965 and the 2000-2005 periods. For the 2010-2015 period, the projected rate is 2.3%. This exceptionally high and persistent

¹⁰ Table 1 in appendix 1 on economic and population growth trends of Sub-Sahara African countries shows a significant variation in economic growth between the countries, with little homogeneity within sub-regions. Countries in Southern Africa are experiencing low economic and population growth rates. The latter is however attributed both to the impact of AIDS on mortality and to a falling birth rate. Economic growth in East Africa varies significantly from one country to the other with population growth throughout the region generally falling by 2 - 2.9%. In Central Africa, economic growth primarily depends on petroleum revenues, and population growth here is highly variable. The economic growth of West African countries is sustained apart from countries that have recently experienced conflicts (Ivory Coast, Guinea-Conakry and Liberia). Population growth is variable here.

population growth is, ironically, accompanied by high mortality. For the 2000-2005 period, life expectancy at birth in Sub-Saharan Africa remained 14 years lower than in South Asia: 48.8 years versus 62.7¹¹. In addition, life expectancy has barely risen since the late 1980s, due mainly to the spread of the HIV/AIDS epidemic. It fell from 49.9 years in 1985-1990 to 48.8 years in the 2000-2005 period, and is expected to hit 50 years in the 2005-2010 period, or 10 years later than what would have been the case had the HIV/AIDS epidemic not occurred (United Nations, 2007a).

To better understand this critical situation marked by underdevelopment, poverty and high population growth, we opted to focus on the issues we consider as critical at this stage of our scientific reflection. Above all, this collective work aims to underline the major demographic trends of Africa as we enter the 21st century while emphasizing historical and demographic perspectives, and current fertility

and mortality trends. It then turns to the relationship between population and development by paying particular attention to the demand for children, the interactions between poverty and fertility, as well as to the role of education and healthcare in achieving sustainable economic growth. The last section of this composite book addresses potential means of action by focusing on the sexual and reproductive behavior of youth as well as on their access to reproductive healthcare.

This synthesis is based on the various contributions to this composite book and attempts to point out the major relationships between population issues (including reproductive health) and economic growth while taking into account the relationships that exist between population dynamics and the sectors involved in social development: economy, healthcare and education. It also seeks to pinpoint the priority areas of action as well as the research priorities identified by the various contributors.¹²

¹¹ Recent WHO projections show that differences in life expectancy will continue widening between Sub-Saharan Africa and the other regions of the world. It is expected that by 2030, its life expectancy at birth for men and women will be somewhere between 50 and 55 years while for the other regions of the world it will be above 65 years (Mathers and Loncar, 2006).

¹² I express my gratitude to Benoît Ferry, Jean-Pierre Guengant, Philippe Hugon and Dominique Tabutin for their remarks all along the writing of this synthesis.

1. The Population Issue in Sub-Saharan Africa

1.1 Low Overall Density and High Population Growth

The demography of Africa is unique due to its historical heritage and its current trends (cf. Chapter 1). It has always been a major factor in the continent's history (Clapham, 2006: 98). Some scholars even see population as the key factor of this history, and have uncovered many distinctive characteristics of this demographic process that have been recurrent over the centuries (Iliffe, 1995, cited by Clapham, 2006). Without going into details, it goes without saying that the history of Africa was dramatically affected by the slave trade and colonialism. In 1900, by which time the slave trade was nearly over, Sub-Saharan Africa had a population of some 100 million with a low population density, which had changed little in the four previous centuries (about 2 persons per square kilometer in 1500 versus slightly more than 4 persons per square kilometer in 1900), and was then unequally distributed. High population density was confined to a few isolated regions: Ethiopian Plateau, Great Lakes region, West African forest zone stretching from present day Southern Ghana to Nigeria, and a few others. Starting in the 1920s, however, population growth took off following the end of the slave trade, the development of colonial administrations and communication routes, and the intro-

duction of Western medicine (Herbst, 2000 and Iliffe, 1995, cited by Clapham, 2006). However, the overall density in 1950, a few years before independence, was still generally low (slightly more than 7 inhabitants per square kilometer). The population was then estimated at a meagre 168 million, which was not conducive to developing human activities and building organized and effective states.

Many decades later in 2005, the population of Sub-Saharan Africa was estimated at 770 million, or 4.3 times what it was in 1950. This resulted from an annual growth rate that was equal to, or above, 2.5% since 1960 (United Nations, 2007a). This population growth rate, the highest in the world for the past 50 years, caused the proportion of Sub-Saharan Africa's population in the world's population to virtually double during the 20th century (rising from 6% to 11%). This occurred during the initial stages of demographic transition and was generated by declining mortality coupled with high fertility, and clearly sets Sub-Saharan Africa apart from other developing regions (United Nations 2003; United Nations, 2005).

1.2 A belated drop in mortality that is currently slowing down or stopping

Sub-Saharan Africa has joined the world's downward trend in mortality (cf. Chapters 1 and 2). This trend began in North-West Europe in the 18th century after the region found ways to overcome major epidemics and food shortages and continued into the 19th century throughout the rest of Europe, North America and Japan. In the 20th century, the trend spread to South America, Asia, the Middle East and finally, though late, to Sub-Saharan Africa. In this region, the fall in mortality did not become fully established

until the second half of the 20th century and it occurred at a relatively slow pace. Today, the main indicators of the region's mortality (a crude death rate of 16%, a life expectancy at birth of 48.8 years and a child mortality rate of 167%) (United Nations, 2007a) are comparable with the levels reached in 1900 by the more advanced countries of the time (England, France, Japan). In concrete terms, Sub-Saharan African countries are among those with the highest mortality in the world and hardly reap the benefits of

advances made in the healthcare sector in other regions of the world, especially in dealing with infectious diseases and malaria, and are the most affected by the HIV/AIDS pandemic (Mesle and Vallin, 1997; United Nations, 2006b).

Child mortality, like overall mortality, did not really begin falling until the 1950s¹³. This downward trend occurred throughout the entire region and was due mainly to an overall improvement in living standards and nutrition as well as to the organization of immunization campaigns. This fall, however, did not occur at the same rates in all countries due to highly variable child mortality rates and marked differences between countries of East and Southern Africa (where the fall in mortality was more significant) and the countries of West and Central Africa. From the 1980s onwards, these differences became less obvious, and in some countries mortality actually rose following the outbreak of the HIV/AIDS pandemic, with Southern Africa and some countries of East Africa being some of the most affected areas. While there are differences among countries, mortality discrepancies are also present along the lines of social categories, education levels and area of residence, with the lowest levels of child mortality being linked to urbanization and education (Hill, 1996).

When adult mortality in Sub-Saharan Africa began dropping off in the early 1950s, it was already much higher than in the rest of the world. The drop was relatively steep during the 1960s and 1970s and outpaced the fall in child mortality. Here too, there were major differences between countries, regions and on the basis of socioeconomic status. This downward trend slowed significantly in the 1980s and 1990s with the rise of socioeconomic crises, numerous local or regional conflicts¹⁴ and the emergence of the HIV/AIDS pandemic (Timæus, 1996).

Early on in this trend, a definitive decline in mortality seemed well underway. In fact, life expectancy at birth rose from 37.6 years to 49.6 years between the 1950-1955 and 1990-1995 periods. But then life expectancy at birth dropped off to only 48.8 years in the 2000-2005 period (United Nations, 2007a). While West Africa, Central Africa and East Africa all experienced a slow-down in falling mortality, in Southern Africa the mortality actually rose: life expectancy

at birth fell by 10 years from 62 years in 1990-1995 to 52 years in the 2000-2005 period. Such trend reversals, previously unheard of except in cases of war and famine, cannot be considered as incidental epiphenomena. On the contrary, they must be interpreted as long-term phenomena with structural causes (Moser *et al.* 2005). The effected countries are varied and include: South Africa, Botswana, Ivory Coast, Cameroon, Namibia, Tanzania, Togo and Zimbabwe. With this new rise in mortality, the slow-going progress made from the outset of falling mortality was lost. Thus, in three countries (Zimbabwe, Zambia and Botswana) life expectancy at birth in 2000-2005 was lower than what it was in the 1950-1955 period. In six other countries (Lesotho, Swaziland, Rwanda, Liberia, the Democratic Republic of the Congo and Ivory Coast), life expectancy at birth in the 2000-2005 period was only 3 to 6 years higher than in the 1950-1955 period (United Nations, 2007a).

Of course, AIDS has had a major impact on this crisis and the health catastrophe in some Sub-Sahara African countries, particularly those in Southern Africa and East Africa. But there are other phenomena involved as well: emergent and resurgent diseases (including tuberculosis, often HIV/AIDS related, drug-resistant malaria, and cholera); economic and food crises; the rise in poverty and inequalities; civil conflicts or wars between countries; state disorganization; rising health costs for households; and the ineffectiveness of healthcare systems. All these factors interact with one another in patterns that are rather poorly understood. While the health transition started well in the African continent as a whole, the process has now reversed (more or less for the long run) in many countries, especially those most affected by AIDS.

¹³ With the exception of a few places before the Second World War, in Ghana particularly and in Togo.

¹⁴ Four million people died either directly or indirectly from the war that wrought apart the Democratic Republic of the Congo between 1998 and 2004. This war turned out to be the worst humanitarian crisis and the world's deadliest conflict since the Second World War (Coghlan *et al.*, 2006). Coined "Africa's First World War", it involved eight States and is ongoing in a rather endemic manner adding its fair share of deaths and refugees to the tolls from other conflicts in Darfur and Somalia which threaten to destabilize the Central African region and the Horn of Africa.

1.3 High Fertility: A Slow and Uneven Transition

Populations of Sub-Saharan Africa have the highest fertility in the world by far (cf. Chapter 1). From an average of nearly 7 children per woman in the 1950s to the 1970s, the fertility rate began dropping during the 1980s and was down to 6.1 children per woman in the 1990-1995 period, and dropped even further to 5.5 children per woman in the 2000-2005 period. The fall in fertility started much later compared to the other regions of the world and is continuing at variable rates from one country to the next. With a high pre-transitional and relatively homogenous fertility rate of 6 to 8 children per woman in the 1960s, excepting a few countries strongly affected by sterility (Gabon, for instance), the drop-off in fertility was sharp in Southern Africa, in some insular countries and in Zimbabwe. It was much slower in twenty other countries where it dropped by 1 to less than 2 children per woman between the 1980-1985 and the 2000-2005 periods. The fertility transition remains slow or has not even begun in some fifteen other countries, for the most part in West Africa and in Central Africa. In addition, the fall in fertility remains highly variable depending on population category: it is much slower among rural and poorly educated populations (Tabutin and Schoumaker, 2004).

The fall in fertility has been late, slow and uneven in Sub-Saharan Africa, as has been the case of contraceptive use, which is also highly variable. In fact, from the most recent available data, use of total contraception (excluding breast feeding) varies from a figure of 3 to 6% in four countries (Chad, Niger, Angola, and Eritrea) to more than 50% in three countries (Zimbabwe, South Africa, and Mauritius). Use of modern contraception varies from a figure of 2 to 5% in six countries (including Chad, Niger, Angola, Eritrea, Mauritania and the Democratic Republic of the Congo) to more than 50% in two countries (Zimbabwe and South Africa). These differences are attributed to divergent but generally slow trends in contraceptive practices. The cases of Asian and South American countries indicate that fertility control can be attained in about fifty years if contraceptive use progresses by about 1.5 percentage points per year until it reaches 70% of married women. Data available on Sub-Saharan Africa show that use of modern methods for periods of at least 10 years has progressed by at least 1.5

points per year in only four countries: Zimbabwe, Swaziland, Zambia and Malawi. For the 14 West African and Central African countries for which such long-term data is available, the progress in the use of modern contraception has been at most 0.6 percentage point per year in Ghana (between 1976 and 2003) and 0.5 percentage point in Cameroon (1978-2004). In the other countries, it has been less than 0.5 percentage point a year. This indicates that if this pace continues, their fertility transition could take at least one hundred years. Clearly, the growth in contraceptive use is also very low in the majority of countries for which no data on trends is available. Overall, low contraceptive use and the low rate of progression here, is not only of concern to landlocked and very poor countries, such as countries of the Sahel region or countries previously and presently faced with internal or external conflicts. Even in the continent's model countries (Cameroon, Nigeria, Senegal, etc.) widespread contraceptive use has hardly taken off (Vimard and Fassassi, 2005).

Sub-Saharan Africa is still far from joining the contraceptive revolution that has occurred in other developing regions. Moreover, contraceptive use varies greatly not only from one country to the other but also within countries depending on area of residence and social group. This high variability constitutes an additional source of inequality between populations as some groups are quite capable, to some extent, of controlling the reproduction of their population whereas others simply cannot. Fall in fertility will depend more and more on the complementarity of various practices: modern contraception, traditional methods of birth spacing (postpartum abstinence and prolonged breast-feeding inducing postpartum amenorrhea), a rise in the age of first marriage, and abortions, which are increasingly common in towns. It has even been estimated that at the beginning stage of this fertility transition, for some urban populations, abortion could reduce fertility just as much as contraceptive use has (Fassassi and Vimard, 2002; Guillaume, 2003). This situation reveals the difficulties faced by many members of the population in getting access to contraceptive measures. Such obstacles are not only cultural, they are also economic and institutional, and might simply be

due to a complete lack of contraceptive services. Abortion, often performed in secret, is a threat to women's health and can reduce their future fertility and even threaten their lives. In fact, a large part of maternal deaths are attributed to abortions carried out under poor conditions (Guillaume, 2000).

We have also noticed that the falling fertility trend is far more unpredictable than was thought some 10 years ago. In effect, in two Sub-Sahara African countries, Ghana and Kenya - which are model countries due to their early formulation of population policies in the 1960s leading to a rapid drop in their fertility -, falling fertility has halted while contraceptive use is on the rise. This stabilization of fertility in the

course of the transition, which is far from over (the average number of children per woman is 4.4 in Ghana and 4.7 in Kenya), is different from what occurred in industrialized countries and many other countries of the South, and demonstrates that falling fertility is neither inevitable nor irreversible. The observed interruption is certainly linked to a common system of closely related factors: stabilization of desired family size, demand for contraception, and contraception practices. It is also associated with a whole range of more distant factors, including the stagnation or decline in socioeconomic development, in education and in child mortality (Bongaarts, 2006). The present situation does not, however, provide indications as to mid and long-term trends given that the stagnations observed are relatively recent.

2. Demography and Economic/Social Underdevelopment: Varying Poverty Levels and Reversible Progress

Recent studies indicate that poverty is a factor of overmortality and high fertility. This is particularly the case in Sub-Saharan Africa (UNDP, 2006; Rutstein and Johnson, 2004). In other words, the difficulties faced by African populations, whether in terms of monetary poverty¹⁵ or living conditions poverty,¹⁶ keep them from effectively limiting procreation and fighting against diseases. It is not entirely surprising that a region which has experienced a

drop in its per capita income during the previous decades (-1.1% in the 1980s and -0.2% in the 1990s, at annual growth rates) has a less advanced demographic transition despite the considerable economic progress in the 2000s with an annual increase in per capita income of +1.6% (World Bank, 2006). On the whole, health programs and family planning policies have been poorly implemented in the entire region.

2.1 Development, Poverty and Fertility

In the area of fertility, various summary studies, particularly those done since 1995, generally confirm the relative fall in fertility in the various countries and marked differences between regions, areas of residence and socioeconomic groups. They also throw light on the relationship between poverty, demand for children and fertility, which is crucial in understanding the factors which account for the trend (cf. Chapters 4 and 5). From a world perspective and at a macro level, countries having witnessed the most precocious and steepest fall in fertility between the 1960s and 1990s are those which are most advanced in economic, education and health areas, rank high in terms of human development, and are less landlocked. Sub-Saharan Africa mirrors this classical model of the fertility transition (Cohen, 1998; Tabutin, 1997). However, only three countries (Mauritius, Réunion, which is a French dependency, and South Africa) witnessed precocious and relatively rapid fertility transitions. From a more precise regional perspective, spatial analyses generally confirm the importance in Sub-Saharan Africa, and elsewhere, of factors related to socioeconomic development in accounting for falling fertility. Among the “explanatory” variables that account for differences in fertility between regions, healthcare development

is by far the most significant, followed by economic development and educational development, and then urbanization (Tabutin and Schoumaker, 2001). At the micro level, the level of families and individuals, most if not all studies agree on the key factors affecting fertility and use of contraceptives: the mother’s level of education and even the father’s level of education, as well as households’ standards of living (Schoumaker, 2004; Vimard *et al.*, 2007). Up to the 1990s, the fall in fertility observed in some groups and areas was mainly attributed to education, urbanization and improvements in living standards. However, poverty remains a key factor in fertility as poor populations tend to have high demands for children with little access to information and effective contraceptive methods for regulating procreation (Tabutin and Schoumaker, 2004).

¹⁵ Nearly half of the population survives on an income of less than one dollar per day (UNDP, 2006).

¹⁶ 38% of infants aged 12-23 months are not immunized against yellow fever, 36% of children do not receive primary education, 54% of women deliver without any professional assistance and 31% of the population still suffers from hunger (UNDP, 2006).

In fact, poverty-stricken populations strive for and are having many children as a strategy to escape poverty, improve their present circumstances, attenuate their fragile situations and secure their future. In national or local contexts where crises and economic insecurity tend to be recurrent, having many children is simply a rational behavior for households. As a family survival strategy, it has more advantages than weaknesses. For poor and destitute social groups, in terms of human and social capital, children are a source of instant income, old-age insurance, enabling diversification of activities and minimization of financial and economic risks. In addition, children are a source of prestige and a symbol of social success, and ensure the social group's posterity. Having children is quite inexpensive and as long as infant mortality remains high this demand corresponds to a real need for insurance and child replacement (cf. Chapter 5).

Of course, it is difficult to determine how the upcoming decades will turn out. With various parts of the region laden with HIV/AIDS, endemic conflicts and urbanization without industrialization, previous patterns of fertility transition could well be modified. In the case of African cities, "poverty malthusianism" might well occur – a process whereby the most underprivileged social classes faced with difficulties and high costs of living (housing, education, and healthcare in particular) begin limiting the number of children they have.

In this respect, it is also necessary to take into account the individualization of economic, social and family behaviors, and the progressive abandoning of traditional beliefs encouraging high fertility. This individualization of behavior could lead to the breakdown of family solidarity especially in situations of recurrent economic and social crises. Such disintegration is observed today in African cities with a rise in the number of street children. It is still doubtful whether the fertility transition of the poor can be achieved without effective contraceptive methods that are accessible and culturally and socially acceptable, particularly with respect to gender.

In most cases, the implementation of family planning programs in the region's various countries has started late. Moreover, such programs hardly benefit from the long-term support of governments and political authorities. The efforts made are often fragmented and hinge upon the instant support provided by non-profit organizations, bilateral donor agencies and multilateral donors. In such a context, it is not surprising that the availability of contraceptive methods in Sub-Saharan Africa is much lower compared to other continents. This is particularly the case in Francophone Africa, which is very much lacking in this area although in terms of policies, services and activities evaluation, it is on more or less equal footing with other developing regions (Ross and Stover, 2001).

2.2 Education, Health, Population Growth and Development

Education and health play decisive roles in limiting population growth and in spurring development. Human capital is more and more critical in the new information and knowledge economy where priority is placed on skills and capabilities (Sen, 1999). The educational and healthcare systems of African societies are highly different in terms of organization and results, and the number of crises and the extent of brain drain to the West has tended to jeopardize the progress made. While there is significant increase in school enrollment, and improvement in health status and mortality, the goals of education and health for all remain utopic objectives in the majority of Sub-Saharan African countries (cf. Chapter 3).

High population growth in Sub-Saharan Africa makes it difficult to generalize education, hence the high number of uneducated women getting married precociously, bearing many children and making poor use of healthcare systems. Inversely, the considerable effort made by some East African and Southern African countries in education during a period of high population growth ended up raising the age of marriage, reducing fertility and improving health status. Having fewer children makes it easier for progress to be made in education and hence in employment, thereby engendering a virtuous cycle.

Obtaining formal education is an effective way of breaking

the vicious cycle of intergenerational poverty transfer as parents level of education is a key factor in the demand for education for children and in the reduction of gender disparities. Education is equally a development catalyst in that it reinforces the factors of economic growth such as innovation, and a spirit of experimentation and science. Likewise, the healthcare sector is key to maintaining a high quality workforce. Better health status and success in education are key factors for improving the quality of human resources and increasing productivity (Behrman, 1996). However, the interdependence of education, health, population and development is based on the nature of the actual productive system. In Sub-Saharan Africa, the dominant economic dynamic is a rentier economy, rather than accumulation, where wealth (land resources, forest resources, human resources and mineral resources) is mobilized for immediate benefit with no outlook for the future, hence the difficulties in setting up the mechanisms for sustainable development¹⁷. In such a system, education plays a positive role in forging a sense of national identity and citizenship, and for the acquisition of the knowledge and skills required for many jobs. However, in these poor countries, once the public service intake has reached its limits, education expansion then tends to create unemployed intellectuals, and encourages their displacement into the informal sector of the job market as well as brain drain to the West (Hugon, 2006).

Not only are education and health critical factors that account for inequalities between countries, they also account for disparities among social groups and individuals. Life expectancy at birth, health and education levels are very uneven across social groups because of the highly variable amount of economic, cultural, human and social capital they possess. Social and family ties are key factors that explain this unequal access to education and healthcare systems. In African countries, public expenditure and foreign assistance tend to go to the more privileged groups given: the high inequality among social groups with respect to education and access to healthcare services; the nature of health systems and their financing; and the priority placed on hospitals in big cities and urban educational institutions. When the fact that part of the State's fiscal revenues arises from the export of agricultural products is placed in the picture, it can be observed that the public healthcare sector and, to a lesser extent, the educational sector, are instruments of redistribution that disfavor the poor and benefit the wealthy, and therefore disfavor rural communities to the benefit of urban groups (World Bank, 1993; Brunet-Jailly, 2002). Giving populations widespread access to healthcare and education while ensuring greater equity and better effectiveness of these systems thus requires completely reorienting many basic services.

¹⁷ It can equally be argued that the import of industrial goods and cultural products, particularly books written elsewhere, in exchange for primary products leads to the dispossession of Sub-Saharan Africa's cultural consciousness thus hampering its development (Ki-Zerbo, 2003).

3. Population and Reproductive Health as Catalysts for Sustainable Development

3.1 Demo-economic Relationships and Population Policies

The strong population growth witnessed after 1950 and the underdevelopment issue led to many studies and discussions on the relationships between the economy and population (cf. Chapter 3). Though very often imbued with ideological considerations, these have nonetheless contributed to rethinking population policies (Hodgson, 1983; Rougier, 1999). Many econometric studies show that there is no concrete statistical relationship between population growth and economic growth (Kuznets, 1967; Easterlin, 1976; Blanchet, 1985 and 1991). A recent study by Ndulu (2006) indicates however that the difference between Africa's economic growth rate and that of other developing countries between 1960 and 2004 (a per capita income growth rate 1.12% less) is due to demographic factors (a population growth rate 0.86% higher). However, other factors are also involved like differences in the rate of school enrollment, rather unequal income distribution, as well as factors associated with institutions and the orientation of economic activity (with priority placed on obtaining rentier incomes, market underregulation, etc.).

In Sub-Saharan Africa, population growth has been a burden on the economy due to the rise in the dependency rate up to the early 1990s¹⁸. This has led to slow growth in per capita income compared to income per worker. From 1960 to 2000, it is estimated that this led to an annual fall in per capita income of 0.4% in Sub-Saharan Africa whereas the other developing regions actually witnessed a fall in their dependency rate starting from the 1970s. In addition to this mechanical effect, such high dependency rates tend to hamper countries efforts to train human capital (Ndulu and O'Connell, 2006).

Many partial and sector-based summary studies have highlighted, on a microeconomic scale, the negative impact of

population growth on economic and social development in a number of areas (United Nations, 1993; Cassen, 1994). The negative effects mainly concern child and household well-being, health status, training of human capital, employment and the creation of economic opportunities for women and youths. Even though these effects are minor and their long-term impact is difficult to ascertain, they did provide new legitimacy for policy intervention in the domain of population in the early 1990s.

This new microeconomic approach to population problems takes into consideration the relationships between gender, health and individuals' reproductive rights. The 1994 International Conference on Population and Development (ICPD) Consensus of Cairo was based on this approach. The new consensus in the study of population programs is grounded: on allowing individuals to readily access the means that will permit them to manage their sexuality and fertility, and on empowering women in all areas (Rougier, 1999). The recognition by political and health authorities of the direct relationships between population and human development issues is reflected in the form of two different approaches. The first is quantitative and is based on a stabilization of the world's population. The second, which is qualitative, sees promoting access to healthcare services and education, as prerequisites for slowing down birth rates and improving reproductive and family health. The neomalthusian paradigm, on which population policies had previously been grounded, has been replaced by the principle

¹⁸ The dependency rate expresses the relation between the number of persons not working and the number of persons working.

stating that “every person has a right to life, liberty and security of person”. But, though the English Bill of Rights of 1689 presented these fundamental rights as universal, they did not apply to women. For women to have free choice over their procreation, it has been necessary to strengthen their negotiating power, individually and collectively, and to implement specific policies (United Nations, 1994).

Thus, there is a relationship between population, economic growth, and development. But the effects of this relationship are not short term, and the relationship between population and sustainable development, acknowledged by the Cairo Consensus, is not direct and univocal. This is rather a multivariable relationship, and it very much depends on the capacity (which varies) of societies and social actors to control the various transformations they go through. Thus, the relationships that are highlighted should be considered with caution in this respect, and depending on the case, a weakness could very well be either an obstacle or an asset. “Malthusian” situations are found in the Highlands of Madagascar, the Comoros Islands, coastal regions surrounding Lake Chad, Burundi, Rwanda and in areas threatened by drought. In these areas, population pressure creates enormous tensions generating a negative impact. However, positive adjustment to population pressures observed in the Bamiléké and Kenyan Highlands point rather to “Boserupian” situations of creative pressure associated with high density.

In this work, we attempt to shed light on the complex nature of the relationship between population and the economy in various societies. We will highlight some virtuous cycles in Sub-Saharan Africa that should be galvanized and

encouraged. A case in point is when increase in school enrollment improves the level of education of women and their participation in economic life leading in the long-term to a drop in child mortality and a fall in fertility, which in turn leads to greater investment in human capital. We will also highlight many vicious cycles that must be circumvented and avoided. Clearly, the worst case scenario is where civil conflicts lead to the disorganization of social systems and production facilities, increasing monetary poverty and a deterioration of living conditions which then leads to a rise in mortality, puts the country in a state of serious social instability and finally brings about the disintegration of all its institutions. Highlighting the various cycles, whether positive or negative, virtuous or vicious, mainly goes to show that we are dealing with a comprehensive system and it is important to better understand these dynamics through a multidisciplinary and systemic approach to the relational patterns at work. As a corollary, political action should take into consideration the effects and counter-effects of sectoral policies by integrating them into more comprehensive approaches.

The recent history of Sub-Saharan Africa shows that the region has not been able to take advantage of the first stages of its population growth to launch a veritable economic take-off. Population growth in many countries of the region is currently too fast considering the capacities of their production system. In fact, these countries are not capable of providing sufficient resources for educating and training their human resources in order to instigate a veritable social and economic development process. Hence, questions about which development and population policies to implement are of utmost importance today.

3.2 The Context of Population Policies in Sub-Saharan Africa: the Cairo Action Program and the Millenium Development Goals

While the principles of the Action Program elaborated during the Cairo Conference in 1994 on “sexual and reproductive health for all” were accepted by the majority of African countries, in many of them the verbal commitments have not translated into concrete action. Ten years later, in spite of the progress made (unequal between countries),

many African populations still do not have access to contraceptives and other reproductive healthcare services nor do they have any real reproductive rights (Gautier, 2006). Doubts remain about future progress on the issue since Millenium Development Goals (MDGs), formulated in 2000, are now the new development and development assistance

paradigm and override the previously adopted programs formulated during the Cairo Conference and the Beijing Conference (1994) on women's rights.

In the domain of population, 3 out of the 8 Millennium Development Goals explicitly refer to improving healthcare: goals 4 and 5 on the reduction of infant mortality and improvement of maternal health, and goal 6 on the fight against HIV/AIDS, tuberculosis and other diseases. If we add to this goals 1, 2 and 3 - reduce extreme poverty and hunger, ensure primary education for all, and promote equality and autonomy for women, respectively - and goal 7 on ensuring a sustainable environment, we do have a comprehensive set of measures for significantly improving the living conditions of African populations¹⁹. However, this is limited by the usual orientations of international institutions based on already recognized definitions which focus on poverty itself and on its consequences rather than on the processes that actually cause poverty (Vimard, 2002)²⁰.

While the substance and the highly quantitative approach of these 8 MDGs, which are sub-divided into 8 targets and 48 indicators²¹, may be questioned, this is however a first step in the path towards ensuring economic and social rights for all human beings and implementing a global policy of worldwide redistribution as defined in Goal 8 ("develop a global partnership for development"). Reducing poverty can no longer only be done by redistribution at the national level, as has been the case with past policies, but now requires redistribution at the world level. In effect, the overall aim of the MDGs is to provide long-term assistance to social public services at emerging international standards level thereby helping to reach minimum standards of living, regardless of each country's actual capacity to reach them on its own. However, the need for a world redistribution effort, which sounds much more like the social policies of a Provident State, is marred with a number of risks: virtual tutelage of public policies in the countries of the South, the management of the South's public services by the countries of the North, etc. (Severino and Charnoz, 2005). Such a global redistribution effort will also require a considerable increase in public assistance for development, which is far from being a given, seven years after the Millennium Development Goals were adopted by the international com-

munity. This is rather unsurprising given that the MDGs were adopted as a catalogue of goals to be reached, but which laid out no concrete strategy or measures for achieving them.

In this area, we have reason to examine a contradiction with reference to the poorest countries, particularly those in Sub-Saharan Africa, as was done by Guengant and Rafalimanana (2005). Millennium Development Goals do not explicitly tackle the issue of family planning thereby making it difficult to reach many of the goals (those related to education, to the capacities and rights of women, and to maternal and child mortality) given the high population growth and the high number of unwanted pregnancies here. Is it possible to achieve or even come close to achieving the MDGs in Sub-Saharan Africa without devoting a significant part of the Cairo Action Program to controlling procreation and reducing fertility? How can the Cairo Action Program be implemented in Sub-Saharan Africa when the larger part of development assistance resources is directed to achieving MDGs?

This is a real contradiction that needs to be dealt with as the majority of governments are not able to carry out sound population policies due to a lack of means. In fact, international support for implementing these policies is weak, and has been falling since 1995. The UNFPA estimates that in 2005 international assistance for family planning initiatives represented only 3% of the financing provided for population programs versus 73% for the fight against HIV/AIDS (UNFPA, 2005).

¹⁹ Fertility and international migration issues were not included in the MDGs as no consensus was found by the members of the international community on these issues.

²⁰ The 2006 World Bank report on the theme "Equity and Development" reaffirms this policy orientation (World Bank, 2005), as broadening development goals well beyond poverty reduction goes against the traditional policies it recommends (Cling *et al.*, 2005).

²¹ See: <http://www.un.org/millenniumgoals>.

3.3 What should be done? Priority Catalyst Areas for Galvanizing Virtuous Cycles

The complex interdependence between education, health, sustainable development and population, as we have seen above, points to the more fundamental problem of poverty. Access to education, healthcare and fertility control must be full-blown goals in, and of themselves in order to bolster individual capacities and rights. It is, however, important to take into consideration the relationships between these variables since focusing only on one catalyst area produces limited results, if any. The timeframe of each of the planned actions should equally be considered. This implies that development programs in Sub-Saharan Africa must move from a sectoral approach to a systemic approach, and that short cycles of political decision must be reconciled with long-term strategy.

In this work, we identify five priority action areas that are presented in random order. While it is important to act on many catalyst areas simultaneously to prop up virtuous cycles or strengthen those already started in some countries, it is also important not to give precedence to any one of these priority areas even though some actions may seem more pertinent in some national contexts than others.

i. Developing education is one of the priority areas, as it encourages long-term growth that is likely to substantially improve living conditions. Education is a key factor in helping individuals fulfil their potential and gain access to freedom of choice in various aspects of life: it enables individuals to obtain more favorable job opportunities; encourages equality between men and women as well as women's autonomy; enables the individual to fight against poverty; and enables a sustainable management of environmental resources. From the demographic standpoint, education plays a key role in lowering mortality and fertility, and also in improving health status, particularly mother and child health. More specifically, the increase in educational opportunities for women is critical as it encourages their participation in modern salaried jobs, a key factor for falling fertility worldwide since the 1960s (Caldwell, 2004), and is also one of the significant factors for falling fertility in Sub-Saharan Africa. It should be noted, however, that universal

primary enrolment and greater access to secondary education is unattainable in the short term for the majority of Sub-Saharan African countries. Efforts in education must be directed towards increasing enrolment numbers as well as improving the quality and content of teaching. Such efforts must certainly be sustained in the long-term. For many countries, attaining a level where the majority of women of procreation age and more than half of the workforce have a secondary level of education will require sustained efforts for at least thirty years.

ii. The fight against child mortality must also be a major operational priority area. In Sub-Saharan Africa, 1 out of every 6 children (17%) dies before reaching the age of five. Given the present state of modern medicine, many of these deaths could be avoided (WHO, 2005). This high child mortality reveals the extent of underdevelopment and is a contributing factor to the poverty trap inasmuch as it is a major reason for the high fertility. Improving living standards (better nutrition and housing) will contribute to a better mother and child health status. Progress in educating mothers and fathers should lead to improvement in morbidity statuses. Besides an overall reduction in human poverty, there is also the need to improve healthcare programs. Four major intervention areas, which also concern children, should be foreseen: the fights against malaria, against infectious diseases, against diarrheal diseases and against AIDS. The fight against malaria (prevention and treatment) is essential as malaria is the cause of death of one million children in Sub-Saharan Africa each year²². Improving immunization and treatment programs for diarrheal diseases must equally be a healthcare policy priority as 25% of Africa's children do not receive any vaccine or treatment for diarrheal diseases (UNICEF, 2005b: 22).

²² Here is what Jeffrey Sachs, the special advisor of the UN Secretary General on the Millennium Development Goals, had to say in this respect in an interview published in the *Le Monde* newspaper on January, 18, 2005: "[Malaria] is a disease that can be prevented in a majority of cases and can be treated in all cases. We know how to go about reducing the number of deaths and patients in a very short period. There is need for adequate medicines and mosquito nets. I find unpardonable that African children go to bed without the protection of a mosquito net which only costs \$5. A mosquito net lasts for 5 years giving a yearly cost of \$1 per inhabitant of rich countries". Such an anti-malarial plan will only cost about 2 to 3 billion US dollars per year.

Preventing children from contracting HIV/AIDS, which mainly occurs via mother-to-child transmission, (during pregnancy or through breast feeding), is equally important given the direct and indirect effects of this disease. In effect, the number of children 0-14 years old living with HIV/AIDS in Sub-Saharan Africa in 2005 is estimated at 2 million while the number of AIDS orphans is estimated at 12 million (ONUSIDA, 2006). In some countries, AIDS is a key factor in rising child mortality, which not only touches AIDS stricken children but also AIDS orphans whose parents died from AIDS causing disintegration of family units. In the fight against AIDS, just like in the fights against malaria, infectious diseases and diarrheal diseases, positive results can be obtained in a very short timeframe, so long as the programs implemented (horizontal or vertical, public or private) are well organized and have sufficient resources. It is equally important to develop programs for treating infected children, which are proven to be effective (Elena *et al.*, 2006).

iii. Access to healthcare is also a high priority area. Health is an integral part of development, and deprivation of health is an aspect of underdevelopment. Lacking access to health information, healthcare services and medical treatment is an element of poverty for the individual. On the country level, lacking adequate healthcare facilities is an element of underdevelopment. As pointed out by Sen, it is equally important to interpret the connections between, on the one hand, health status and the development of the healthcare sector, and on the other hand, the individual's quality of life as a galvanizing agent in the economy, as well as an agent of social and policy change. The issue of healthcare systems' effectiveness should be placed at the center of development policies (Mach, 2004). It is more of a question of promoting healthcare services (and reproductive health services, see below) accessible to everyone, particularly the most destitute (FNUAP, 2004). In Sub-Saharan Africa, there are highly unequal levels of access. Hence, these policies must include an element of equity necessary for long-term growth and development and ensure access to healthcare services for everyone²³.

Faced with this equity requirement, the strategic issue that then comes up is that of financing. While the resources allo-

cated to the healthcare sector increased in the region's richer countries, in the poorer countries, these have stagnated and even fallen in some cases. In addition to this inequality between countries, there are inequalities between families as the majority of African States have given up on the idea of free healthcare for all due to budget constraints. As a result, since the Bamako Initiative in the mid 1980s, States have now resorted to paid medical service to cover costs, which is a major drawback for poorer families²⁴. Hence, more often than not, they are forced to make medically unfounded choices regarding whether or not to seek the healthcare or medicines prescribed to them, and between modern or traditional medicine. It is important to come up with mechanisms to finance access to healthcare services (user contributions, social security, mutual insurance company, grants, etc.) that are adjusted to patients' different economic status and level of income as well as to the nature of the healthcare services provided (Audibert *et al.*, 2003). As is the case of the fight against child mortality, it is also possible to quickly improve populations' health status by making minimal improvements in primary healthcare service, which would increase life expectancy at birth (particularly in countries where it is below 50 years). But this requires: adequate healthcare coverage over the entire national territory; good complementarity between the various levels of healthcare services (primary health centers, intermediate facilities and national reference hospitals); competent, motivated and uncorrupt personnel; and in short, a satisfactory operation of the public healthcare system. This is far from being the case in many countries. In fact, recent anthropological studies in a number of West African countries have pointed out that most public healthcare systems are in very sad states (Jaffré and Olivier de Sardan, 2003)

²³ The idea of equity has been identified as one of the factors likely to speed up the demographic transition (Repetto, 1978).

²⁴ It is estimated that 40% of the total expenditure on the healthcare sector in Africa comes from individuals while state expenditure only accounts for about 37%. The greater portion of donor financing is earmarked for the budgets for equipment and facilities development rather than to assist in the financing of current operating expenditure like salaries, medicines and maintenance (World Bank, 1997).

iv. Access for all to reproductive health services is another priority area that is most often ignored given the critical nature of other problems faced by healthcare services in general. There are many difficulties in trying to provide access to reproductive health services for all. The first difficulty is linked to the very broad definition established during the Cairo Conference, which extends to maternal and child health, family planning, sexually transmitted diseases, seropositivity and AIDS, sterility, post-abortion healthcare, genital cancers, conjugal violence, fertility and sexual rights. In spite of the importance of all these elements, it is most often impossible to come up with the means required to address all of them satisfactorily, hence the need to make choices. The second difficulty has to do with the recommendation to integrate reproductive health services into the public healthcare system for the sake of coherence and economics of scale. In fact, many less developed countries acknowledge that they are unprepared for this integration due to institutional and operational bureaucratic bottlenecks. Hence the need for vertical programs to deal with certain problems like: the fight against AIDS, the fight against malaria, immunization against some diseases, etc. In fact, the recommended overall approach to reproductive health tends to make family planning a matter of secondary importance. However, the 1994 Cairo declaration is most welcome in this respect: "All countries must take measures to meet up as soon as possible with the needs of their population in the area of family planning and, by 2015 should strive by all means to make available a complete range of reliable family planning methods and associated reproductive health services, which are not contrary to law, for every person." This commitment has gone unheeded in spite of the many unmet needs in the area of family planning in Sub-Saharan Africa. It is a basic deprivation of human rights for an individual to lack the means to safely control his/her procreation.

While it is important to focus on providing information, access to family planning services and its follow-up, for many countries, however, meeting the population's needs in this area remains a distant goal. In effect, the figures on the contraceptive prevalence rate at the beginning of the 2000s range from 10 to 40% in the majority of Sub-Saharan African countries. Assuming that the contraceptive preva-

lence rate is increased by one percentage point yearly, it will take between 30 to 60 years to arrive at a prevalence rate of 70%, which fulfills requirements; and between 15 to 30 years if the goal is to increase the contraceptive prevalence rate by two points each year, something that very few countries in the world have actually managed to achieve (Guengant and Rafalimanana, 2005). Thus, it will take time for population growth to slow down and this will only be achieved through fertility control and a continuous rise in the use of contraceptives. It is critical to turn to the commitments undertaken during the Cairo Conference of 1994 given that most of the Millennium Development Goals (particularly those concerning education, equality between men and women and women's autonomy, reduction of maternal and infant mortality) are hindered in most Sub-Saharan African countries by high population growth, at-risk pregnancy (numerous, poorly spaced, early and late) and unwanted pregnancies.

v. Improving young generations' access to reproductive health should be a specific area within the framework of a policy that goes well beyond the mere provision of healthcare services. The behavior of young generations in upcoming years will be decisive in shaping this region's population dynamics. These youths start their sexual and reproductive lives in an environment of social and economic precariousness associated with rising educational costs and the underemployment of those breaking into the job market, as well as in an environment rendered vulnerable healthwise with the spread of HIV/AIDS (cf. Chapter 6). Today, we are faced with a changing social context in terms of sexuality and procreation with the relaxation of behavior controls previously enforced by family institutions on the basis of tradition. Moreover, new actors have emerged (schools, the media, NGOs, and peers) that are dictating new behavioural models, especially among adolescents and youths. These trends have led to a decline in traditional behavior among youths leading to a rise in the age of first marriage. This, together with the relaxation of family control, has contributed to the rise of premarital sexuality and risk behavior leading to the rise of STDs as well as premarital fertility and abortion. In effect, unmarried youths have difficulties getting access to reproductive health services. This explains their low level of contraceptive use,

especially of modern methods²⁵, and their frequent recourse to voluntary pregnancy interruption – associated with high morbidity and mortality given the non-medical contexts of the procedures. To bring this precarious succession of events to an end, it is necessary to develop sexual and reproductive health programs that target youth and enable them to easily get access to reproductive health services even if they are not married. If these actions are well organized and effectively carried out, this should generate relatively quick results, particularly in preventing early pregnancies and risk behavior.

All the priority actions briefly presented here should galva-

nize new positive dynamics by bringing together virtuous cycles combining progress in education, improvement of health status and fertility control, reduction of mortality and fertility, progress in inserting youth into the job market, increase in the productivity of economic agents, etc. Apart from the priorities pointed out here, we can also cite actions that are not dealt with in this work but which are just as necessary for the success of the virtuous cycles referred to above. These include: the fight against corruption (very detrimental to equal-opportunity healthcare systems, cf. Jaffré and Olivier de Sardan, 2003), better state control over its territory, the end of civil conflicts, the return of refugees to their country...

²⁵ While use of condoms has recently been on the rise with promotion campaigns carried out during HIV/AIDS prevention programs, its usage is more often than not incorrect or it tends to be used irregularly.

4. Research Priorities for Improving Knowledge

Despite recent progress in terms of survey data, particularly with the Demographic and Health Surveys (DHS) program, basic demographic and economic data remain insufficient and virtually non-existent for countries affected by civil wars (Angola, Congo, the Democratic Republic of the Congo, Somalia, etc.). Even when such data is available, it is hardly useful for an indepth analysis of the relationship between population changes and economic changes. The same goes for social and health statistics, which are often scant and of little use. Moreover, getting information from primary sources such as population surveys is often difficult, if not altogether impossible. These gaps in the data are drawbacks to research. There is therefore a need to tackle these difficulties to better understand the various interrelations at work and their dynamics over time, which is useful in elaborating policy.

Deficiencies of available analyses, highlighted in this composite book, and operational priorities that we have identified above, point to some of the priority areas for research in the upcoming years.

i. Understanding demo-economic relationships and the impact of poverty. Research analyzing the population-development relationships is greatly hindered, especially in Africa, by a lack of data relating demography and economy. The reciprocal effects between population growth (high or slowing down) and economic growth remain a gray area. Population dynamics and population policies are often overlooked in economic studies. And even when they are mentioned, it is usually done in passing or marginally. Inversely, population studies tend to ignore economic dynamics and only consider a few individual variables (economic activity, activity status, material living conditions, etc.). Given these shortcomings, research needs to give more importance to demo-economic relationships: the effect of poverty on demographic behaviors, the

relationship between population structures and economic dynamics, among others. The relationship between poverty and reproductive behavior, which is a focal point of this work, is one particularly notable gray area in the research. Too many studies are limited to the differential study of fertility relative to standards of living. Even though this descriptive approach is useful, it is however insufficient and should rather extend to all intermediary variables, and particularly behavior of fertility control, which vary in relation to level of poverty. The interaction between poverty and mortality, especially adult mortality, is another gray area which is poorly documented. Poverty engenders malnourishment and a short-term subsistence logic, usually uncondusive to a good health status. Inversely, disease and mortality are factors that lead to poverty and vulnerability: fall in work productivity and less involvement in schooling, family instability, less social mobility, etc. Demographers must broaden the scope of their data to include all these areas (for instance, by organizing surveys on living conditions and budget-consumption) and better integrate demographic and economic data into their analyses.

ii. Understanding the decisive factors behind current population changes. In demography, the factors determining trend reversal or stabilization, which have been major phenomena in the recent history of Sub-Saharan Africa, are poorly understood. These trend reversals and interruptions to the progress of demographic transition must be studied in depth and monitored in order to better assess the true nature of these phenomena, whether incidental or structural. In particular, there is a need to better understand rising mortality, and consequently the associated question of decline in health status, fertility stabilization and low use of contraceptives. A multidisciplinary approach integrating demographic, economic and sociological analyses is needed here given the diverse nature of the factors involved.

Such research could focus on the impact of crises and poverty, on the consequences of AIDS and emergent and resurgent diseases, on the effects of the financial policy reorientation of health programs (reorientation of financing from family planning to the fight against AIDS, in particular) and on the repercussions of civil crises and conflicts that have torn apart many countries on the continent.

iii. Interpreting the low progress in contraceptive use.

The failed demographic transition, essentially marked by high mortality rates and low progress in contraceptive use, merits special attention. Concerning low progress in contraceptive use, especially in Francophone African countries, a number of issues need to be looked at in depth: firstly, the underlying reason why desired fertility is so high to better account for the persistently high fertility and low contraceptive use in various populations; secondly, the causes of the low supply and the poor quality of contraceptive services provided to populations; thirdly, the reasons why many people prefer other contraceptive practices to modern methods. In this last respect, there is a need to take a look at African populations' adoption of relatively new and atypical ways of controlling fertility (when compared to the modes of fertility control in more classical transitions) with increasing diversity in behavior of fertility control.

iv. Analyzing the factors of high mortality. Persistent high mortality, decline in health status, and high social and geographical inequalities all point to the need for studies on mortality. Despite recent improvements in data collection via demographic and health surveys, demographic studies on mortality have been inadequate since the 1980s. It is important to emphasize a number of gray areas in particular. First of all, more emphasis should be placed on adult mortality. This is a poorly understood area although it could well be a relatively significant part of total mortality, considering the fall in child mortality. In fact, the former has been on the rise in some countries for reasons not always attributable to AIDS. It is also important to carry out studies on the causes of mortality in order to make up for fragmentary knowledge, and for better orientating health and medical research programs. AIDS associated mortality should also be an important area of research as its impact and trends are not fully understood. In fact, AIDS is one of the most

significant contemporary factors in the domains of population and health. It is now the main cause of adult mortality in some Sub-Saharan Africa countries, and has completely altered the area's cause-of-death ratios. AIDS, and fear of AIDS, have also brought about a change in the biology and behaviour of human reproduction in ways that are poorly understood. In upcoming years, the trends of the pandemic will have a critical bearing on the trends of life expectancy and population structures. Explanatory studies on mortality are still in their infancy. A critical theoretical framework is needed to delineate the mechanisms of precariousness and to explain its effects on human health. Finally, more studies should be directed towards the unequal exposure to risk factors, the unequal access to healthcare systems as well as the differences within the systems.

v. Improving knowledge on the effectiveness of some operational catalyst areas.

Analyses of the complex relationship between education, health and population should focus on research areas that will lead to better grasping the processes by which progress made in education and health are important catalysts of demographic transition. To start with, institutional environments have to be taken into consideration. It is in this context where great poverty arises that the situation of weak and fragile states should be examined. It will be useful to determine with the specificities of the relationship between population, health and education variables in the contexts of weak institutions and authorities, where conflicts and insecurity are recurrent, and where little data and few analyses are available. It is important to identify the thresholds that define poverty traps and those that bring together different complementary catalyst areas into play. With its increasing presence in many countries, the role of religion, especially evangelical churches and Islam, in demographic behaviours should also be considered. Finally, it is necessary to develop practical research to better understand the actual impacts of the various health and educational programs. The following areas should be given particular attention: health programs aimed at reducing inequalities in morbidity and mortality; family planning programs; the respective impacts of integrated programs and vertical programs; and finally, the results of programs aimed at reducing differences in the school enrolment of boys and girls.

5. Conclusion

In 2004, a group of experts was assembled by the US National Intelligence Council to carry out a prospective assessment of the future of Sub-Saharan Africa for the 2020-2030 horizon. They did not find it worthwhile to examine the demographic phenomena of the region, which they deemed too unpredictable (NIC, 2004), as if the economic and political domains were devoid of similar contingencies and uncertainties! We, on the contrary, believe that it is crucial to integrate population issues into scientific thinking and political action.

Sub-Saharan Africa is ridden with poverty and inequality with 44% of its population living in a state of extreme poverty. What applies in the domain of economics and the environment (with respect to employment, and access to natural resources, means of production, technology and knowledge) also applies to the domain of population. There are very few means available to Africans for controlling fertility and fighting against diseases (more rampant and deadly here than anywhere else in the world), and the few means that exist tend to be unequally distributed among the countries and various social categories. Life expectancy in the region has dropped to 49 years from 50 years in the 1980s. Nearly 1 out of every 10 children dies before the age of 1, while 1 child out of every 6 children dies before the age of 5. The maternal mortality rate of 870 per 100,000 live births is by far the highest in the world. These are but a few of the indicators highlighted in this work that attest to the critical nature of the situation in the region, with some countries in better situations while the conditions in others are much more dramatic.

In this summary, the major factors in the relationship between education, health, reproductive health, population and development are delineated. Some operational priority areas are suggested in the domain of population, and prio-

riety areas of research needed for better guiding policy action are highlighted. To conclude, we underline below the major characteristics of Sub-Saharan Africa's demo-economic trend to better understand the political stakes:

- late entry into the demographic transition movement (slow fall in mortality or rising mortality; high fertility with uneven downward trends) compared to other developing regions;
- low economic and social development based on a rentier economy dominated by a low value-added primary production sector (agriculture, coastal fishing, forest exploitation, and mining) usually associated with widespread monetary poverty, often extreme, and very poor living conditions;
- diversification of demographic regimes, and political and economic systems. Depending on the country concerned and period, population growth is more or less high, the political regime is more or less democratic and the economy is more or less strong. South of the Sahara, there is not one Africa but rather several "Africas" given the diversity of countries, which differ from one another within the same sub-regions and are less homogenous than could be imagined despite the presence of the neighborhood effect;
- increase in social and spatial inequalities within the same country with respect to population (nuptiality, fertility, mortality) and economy (access to education, employment, area of residence, etc.). These inequalities explain the marked economic differences and social stratification between the educated and illiterate, and between urban and rural inhabitants;

- dramatic reversal of some progress made with respect to mortality and adult or infanto-juvenile health status due to AIDS, conflicts and poverty. Southern Africa, which was once the most developed region in every respect as well as the most advanced in its demographic transition, now has the lowest life expectancy at birth due to the impacts of the HIV/AIDS epidemic on the region. This reversal also applies to the economy, especially with respect to the unpredictable nature of international prices of primary products, oil, and cash crops, as well as political instability and economic disorganization. Zimbabwe is in many respects an extreme case of reversal and decline in both areas. Formerly a leader in progress in healthcare and population growth control, Zimbabwe is today encumbered by HIV/AIDS and has seen a dramatic fall in its life expectancy. This country once had a flourishing export oriented economy and agricultural sector, but is now on the brink of bankruptcy because of poorly managed agricultural reform. It is faced with skyrocketing inflation, a breakdown of public services and massive impoverishment of the population.

A reversal and decline in these significant areas has recently been observed in a number of countries. Some economies have, however, been improving or recovering, particularly because of the rise in the prices of oil and mining products. We are also witnessing a noticeable fall

in population growth in some countries and certain population categories. This all points to the divergent realities and the uncertain future of Sub-Saharan Africa. While there is no reason here for fatalism - significant advances have been made in the fight against onchocerciasis and in dramatically reducing the number of cases of dracunculosis and leprosy -, all these areas will require improved and ongoing efforts. This is particularly the case of immunization policies.

The classic demographic transition model is not unfolding in Sub-Saharan Africa as it did in other developing regions. Health status has hardly improved, the level of technology is low and dependency on working adults is high. Adopting and implementing policies geared towards the priority action areas we have suggested: education, the reduction of mortality, equitable access (including youths) to healthcare and reproductive health services, should galvanize progress and improve living conditions. Actions focusing on population should be embedded within a larger framework of development policy without which their impact on the overall dynamics will be limited. This broad policy orientation should largely focus on economic growth and, in particular on: pursuing productivity gains in agriculture, improving the management of oil and mining revenues, resolving internal conflicts and conflicts between countries, and achieving political stability, all goals that hinge upon strengthening democratic states and stifling nepotism and sectarian tendencies.

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Appendix 1

Table 1: Economic Growth and Population Growth by Sub-Sahara African Country

Level of Population Growth: average annual population growth rate,2000-2005	Level of Economic Growth: Average annual growth rate of GNP, 1996-2005 (%)			
	Very Low or Declining Growth(-2.4 to 2.8%)	Low Growth (3.1 to 4.0%)	Sustained Growth (4.5 to 8.4%)	Oil Exports Led Growth (1.7 to 20.9%)
3% and above	Érithrea (2.2; 4.3)		Uganda (6.1; 3.4)	
	Sierra Leone (1.1; 4.1)		Benin (4.8; 3.2)	Chad (7.8; 3.4)
	Burundi (1.2; 3.0)	Niger (3.5; 3.4)	Burkina Faso (4.6; 3.2)	Congo (3.5; 3.0)
	Guinea-Bissau (0.6; 3.0))		Mali (5.7; 3.0)	
2 to 2.9%			Mauritania (4.9; 3.0)	
			Gambia (4.5; 2.8)	
		Madagascar (3.3; 2.8)	Éthiopia (5.5; 2.4)	
		Togo (3.3; 2.7)	Rwanda (7.5; 2.4)	Angola (7.9; 2.8)
	DRC Congo (0.0; 2.8)	Malawi (3.2; 2.3)	Cap-Vert (6.5; 2.4)	Equatorial Guinea (20.9; 2.3)
	Comoros (2.0; 2.6)	Sao Tomé and Príncipe (3.1; 2.3)	Senegal (4.6; 2.4)	Nigeria (4.0; 2.2)
	Kenya (2.8; 2.2)	Guinea-Conakry (3.6; 2.2)	Ghana (4.7; 2.1)	
			Mozambique (8.4; 2.0)	
		Tanzania (5.4; 2.0)		
1 to 1.9%	Ivory Coast (1.5; 1.6)	Zambia (3.6; 1.7)		
	Liberia (-8.7*; 1.4)	Namibia (4.0; 1.4)	Cameroon (4.5; 1.9)	Sudan (6.4; 1.9)
	Central African Republic (0.9; 1.3)	South Africa (3.1; 0.8)	Mauritius (4.9; 1.0)	Gabon (1.7; 1.7)
Less than 1%	Seychelles (2.0; 0.9)			
	Zimbabwe (-2.4; 0.6)		Botswana (5.7; 0.1)	
	Swaziland (2.8; 0.2)			
	Lesotho (2.7; 0.1)			

Source: World Bank (2006) ; United Nations (2005).

* For the 2000-2004 period. The data for the 1996-2000 period is unavailable.

Note: The first number in brackets is the economic growth rate, the second number in brackets is the population growth rate in the respective periods.

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