POPULATION AND DEVELOPMENT

IN THE SAHEL:
Policy Choices to Catalyze a Demographic
Dividend

DISCUSSION PAPER

AUGUST 2016

Meera Shekar Abdo Yazbeck Rifat Hasan Anne Bakilana





POPULATION AND DEVELOPMENT IN THE SAHEL:

Policy Choices to Catalyze a Demographic Dividend

Meera Shekar, Abdo Yazbeck, Rifat Hasan and Anne Bakilana

With contributions from Corrina Moucheraud, Sarah Castle, Latif Dramani, Aissatou Diack, Haidara Ousmane Diadie, Djibrilla Karamoko, Ibrahim Magazi

Health, Nutrition and Population (HNP) Discussion Paper

This series is produced by the Health, Nutrition, and Population (HNP) Global Practice of the World Bank Group. The papers in this series aim to provide a vehicle for publishing preliminary results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank Group, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character.

For information regarding the HNP Discussion Paper Series, please contact the Editor, Martin Lutalo at mlutalo@worldbank.org or Erika Yanick at Eyanick@worldbank.org.

© 2014 The International Bank for Reconstruction and Development / The World Bank 1818 H Street, NW Washington, DC 20433 All rights reserved.

Health, Nutrition and Population (HNP) Discussion Paper

Population and Development in the Sahel: Policy Choices to Catalyze a Demographic Dividend

HNP Global Practice, World Bank, Washington, DC

Abstract: The demographic transition in the Sahel region has been slower than that in the rest of the world. Although child mortality rates have declined in recent decades, they are still higher in West Africa than in other regions. Furthermore, the fertility decline has progressed very slowly, with some countries seeing stalls and others even an increase in birth rates. The speed with which this transition takes place has a critical impact on a population's age structure and future potential for economic productivity.

The current rates of change in the Sahelian subregion will make it unlikely that countries will achieve an age structure that will create a youth bulge of a healthy, well-nourished, and educated cohort ready to enter a modern labor market to capture a sizable demographic dividend. Once missed, this opportunity for a demographic dividend will not return. This analysis uses quantitative data triangulated with the qualitative findings and policy analyses to identify the triggers necessary to accelerate the demographic dividend in this subregion.

Keywords: Sahel, demography, demographic dividend, development

Disclaimer: The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

Correspondence Details: Meera Shekar, The World Bank, Health, Nutrition & Population, 1818 H. Street, NW, Washington DC 20433, United States, +1 (202) 473-6029, mshekar@worldbank.org, www.worldbank.org.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	VII
EXECUTIVE SUMMARY	VIII
POPULATION AND DEVELOPMENT IN THE SAHEL	VIII
POPULATION SIZE, STRUCTURE, MORTALITY, AND FERTILITY	VIII
OPPORTUNITIES IN THE POLICY SPACE	
GOING FORWARD: SHORT-, MEDIUM-, AND LONGER-TERM ACTIONS	X
ABBREVIATIONS	xıv
PART 1 – INTRODUCTION AND CONTEXT	1
THE DEMOGRAPHIC DIVIDEND	
SOURCES AND SPEED OF POPULATION GROWTH	4
GENESIS AND OBJECTIVE OF THIS REPORT	
POPULATION, THE WORLD BANK, AND PARTNERSHIPS	
PART II – THE DEMOGRAPHIC PICTURE: QUANTITATIVE ANALYSIS	7
POPULATION SIZE AND RATES OF GROWTH	7
POPULATION DYNAMICS AND STRUCTURE	
DETERMINANTS OF HIGH FERTILITY IN THE REGION	
DEMAND FOR CHILDREN AND CONTRACEPTIVE USE	14
PART III – DIGGING A LITTLE DEEPER: QUALITATIVE ANALYSIS	19
THE DEMAND FOR CHILDREN	
FINDINGS ON SOCIOCULTURAL FACTORS	
FAMILY PLANNING SERVICE PROVISION AND TRAINING OF WORKERS	
POPULATION GROWTH, MIGRATION, AND URBAN LIVING	
EDUCATION AND TRAINING	
YOUTH EMPLOYMENT AND THE BUSINESS ENVIRONMENT	
BANKING AND SAVINGSKEY MESSAGES FROM THE QUALITATIVE INQUIRY	
PART IV – POLICY SPACE ANALYSIS	
POLICY MAPPING: A GLOBAL REVIEW OF EVIDENCE	
Family Planning	
Age at Marriage	
Infant and Child Health	
Education	
Main Messages from the Global Review of Evidence THE FOUR-COUNTRY POLICY SPACE ANALYSIS	
Burkina Faso	
Côte d'Ivoire	
Mali	
Niger	
Main Messages from Policy Space Analysis	50
PART V – PRIORITIES FOR POPULATION IN THE SAHEL	
WHAT IS THE POPULATION PICTURE IN THE SAHEL?	52
WHY HAS THE REGION LAGGED ON THE DEMOGRAPHIC TRANSITION?	
How Can Sahel Countries Address Population Dynamics?	
A Few Concluding Thoughts	

APPENDIX 1: METHODOLOGY	5
QUANTITATIVE ANALYSIS	5
QUALITATIVE ANALYSIS	
POLICY SPACE ANALYSIS	59
REFERENCES	6

ACKNOWLEDGMENTS

This Study on Population and Development in the Sahel was conducted by a team consisting of Anne Margreth Bakilana (Senior Economist, Health), Aissatou Diack (Senior Health Specialist), Haidara Ousmane Diadie (Senior Health Specialist), Rifat Hasan (Health Specialist), Djibrilla Karamoko (Senior Health Specialist), Ibrahim Magazi (Senior Health Specialist), Meera Shekar (Lead Health Specialist), and Abdo S. Yazbeck (Lead Health Economist). The Team worked under the guidance of Trina Haque (West and Central Africa Health Sector/Practice Manager). The Study received support and guidance from Country Directors Ousmane Diagana, Paul Noumba Um, and Madani Tall. The Project Concept Note meeting was chaired by Shantayanan Devarajan (Chief Economist, AFRCE) and the Decision Meeting by Francisco H. G. Ferreira (Chief Economist, AFRCE). Peer reviewers included Cheikh Mabcké (Senior Advisor, Population Program, Hewlett Foundation), Sahlu Haile (Senior Advisor, Packard Foundation), Volker Treichel (Lead Economist and Sector Leader, AFTP4), and Michele Granolati (Lead Economist and HD Sector Leader, LAC).

The Team was also supported by consultants working on background documents along three dimensions: (1) quantitative analysis of population dynamics in the Sahel was supported by the African Institute for Development Policy (AFIDEP) and Latif Dramani; (2) qualitative work around fertility choices was supported by Sarah Castle, who led a team of consultants in each of the countries including N'Djore Maurice Adama, Mamadou Faramba Camara, Hamidou Issaka Maga, Gnoumou Thiombiano Bilampoa; and (3) policy space analysis was supported by Corrina Moucheraud and Baba Traore. The Team also wants to thank UNFPA for critical support in the initiation of the work and in ensuring robust country level engagements; with special thanks to Dr. Benoit Kalasa (UNFPA Regional Director West Central Africa) as well his colleagues Hassane Ali, Monique Clesca, Makane Kane, Mamadou Kante, Suzanne Konate Maiga, and Mantala Traore. The Team also would like to thank Hope Steele for editorial assistance and Siméon Alaté for translation of the document into French.

The authors are grateful to the World Bank for publishing this report as an HNP Discussion Paper.

EXECUTIVE SUMMARY

POPULATION AND DEVELOPMENT IN THE SAHEL

The demographic transition in the Sahel region has been slower than that in the rest of the world. Although child mortality rates have declined in recent decades, they are still higher in West Africa than in other regions. Furthermore, the fertility decline has progressed very slowly, with some countries seeing stalls and others even an increase in birth rates. The speed with which this transition takes place has a critical impact on a population's age structure and future potential for economic productivity. The current trends in both of these aspects of the demographic transition will delay investments in human capital including health, nutrition, and education, and will place tremendous pressure on family and government resources, deter poverty reduction, and hinder economic growth.

The expression "demographic dividend" was first used in the late 1990s to explain part of the impressive economic growth in some East Asian economies, such as the Republic of Korea and Singapore. Demographic dividend refers to the gains in economic growth that could be attributed in large part to sustained change in the age structure of the population that results from declines in mortality and fertility. The shift from high to low levels of child mortality and fertility is known as the demographic transition. Every country in the world has undergone or is now undergoing this natural phenomenon (demographic transition), but each achieves this at its own speed. The speed with which this transition takes place has a critical impact on a population's age structure. A fast transition creates an age structure where a large share of the population enters the labor market within a short period, creating an opportunity for a large increase in household and national income. This increase in household and national income is known as the first economic demographic dividend. A large increase in the percentage of the population who are working age, however, is necessary but not sufficient to achieve the economic benefit of the demographic transition: the first economic demographic dividend is not automatic even if the demographic transition is accelerated. Jobs are needed to turn the favorable age structure into economic growth. A second potential economic demographic dividend can also be achieved with appropriate economic and financial policies. This second economic dividend is captured when the youth bulge starts to earn more and starts (or is encouraged) to save for retirement. Savings then translate into investments that produce the second economic divided.

The current rates of change in the Sahelian subregion will make it unlikely that countries will have an age structure that will create a youth bulge of a healthy, well-nourished, and educated cohort ready to enter a modern labor market to capture a sizable demographic dividend. Once missed, this opportunity for a demographic dividend will not return.

This report uses a mix of quantitative, qualitative, and policy analyses to develop the demographic picture of West Africa, explain the reasons behind it, and offer recommendations on the way forward to accelerate the demographic transition and harness the demographic dividend. This wider focus on population dynamics and the potential for a demographic dividend in the Sahelian subregion with its many ramifications is also what differentiates this report from previous work that has focused only on the health sector. Furthermore, this analysis goes beyond making the case for addressing the demographic dividend: it presents specific time- and order-sensitive policy recommendations across different sectors that can improve the prospect for each of these countries to capture the dividend and escape a demographic disaster.

POPULATION SIZE, STRUCTURE, MORTALITY, AND FERTILITY

The quantitative analysis indicates that population sizes in the Sahel are projected to increase quickly after 2025, reflecting the large cohorts from previous high levels of fertility. The overall population is very young—median ages are between 15 and 19—and, given current trends, these countries are not projected to age much in the coming decades. Dependency ratios are very high: as high as around 100 dependents per working-age adult in Chad and Niger, with Burkina Faso and Mali following closely. These

dependency rates are projected to remain much higher than they are for other countries in Sub-Saharan Africa from now to 2070.

Life expectancy at birth is very low across the eight countries of the Sahel considered in this report. While infant and child mortality has declined dramatically in recent decades, they are still high relative to other subregions in Africa. Maternal mortality shows mostly downward trends, but with evidence of stagnation in Chad since 2000. From the qualitative analysis, it is clear that although infant and child mortality is on the decline in the Sahel, the perceived cost of children has only recently begun to converge toward the global experience. Families continue to see children as insurance for old age support, and raising children is not perceived to be costly. Practices such as child fostering, which are very specific to these Sahelian countries, offer an alternative when the cost of raising children becomes too high.

Fertility has declined at a very slow rate between 1980 and 2010. A number of countries show stagnation in fertility decline, with some even experiencing an increase. These high fertility rates are accompanied by early marriage and early childbearing. Age at first marriage has increased very slowly across the eight countries, and a very young pattern of fertility persists. Marriage and childbearing occurs at very young ages: by age 20, more than 50 percent of women have experienced both of these life events. Furthermore, the perceived ideal number of children remains high, even among women with higher levels of education, living in urban areas, and from wealthier households. Finally, contraceptive prevalence rates are very low in these countries.

The qualitative analysis shows that, in many of the countries, the use of family planning is often considered unacceptable within the religious and social doctrines. The data suggest that tailoring family planning messages toward the benefits of spacing children for the health of the mother and child—as well as well as the ability to look after and invest in fewer children—may be more socially acceptable. Family planning service delivery can also benefit from bundling these services with immunization, nutrition, and postnatal care services—this is especially the case in contexts where male disapproval is high and women may need to acquire family planning covertly. To increase access to family planning services, respondents in the study considered it important to provide family planning in a diverse range of settings and locations, including harnessing the private sector and serving hard-to-reach groups via mobile clinics and community outreach. Furthermore, the quality of services could be improved by training health care workers better: the knowledge and skills of service providers appear to be insufficient, especially with respect to side effects and long-term family planning methods.

Overall, a higher age of the mother, longer marital duration, women's disapproval of family planning methods, and a lack of formal employment are associated with an increase in the number of children ever born to a household. On the other hand, increases in socioeconomic status, age at first marriage, and the level of education of both the wife and the partner are strongly associated with a decrease in the number of children ever born to a household. The use of modern family planning methods was positively associated with an increase in household socioeconomic status, education level of the mother, partner's approval of contraceptive use, and a higher number of living children.

These quantitative results on the determinants of fertility and family planning use are triangulated with the qualitative findings. Men and religious leaders are influential in setting social and behavioral norms, and their approval is critical in women's use of family planning and ideals of family size. Access to education is challenging even at the primary level, especially in rural areas, compromising a lifetime of opportunities. Dropping out of school is common, especially for girls, who drop out because of the demand for their labor in the household or because of early pregnancy. Barriers to girls' secondary school education include traditional values that favor limited education for girls coupled with early marriage and childbearing. In addition, young women's motivation for secondary school and university is low because many perceive their opportunities in the job market to be limited when faced with competition from male graduates.

OPPORTUNITIES IN THE POLICY SPACE

Based on the quantitative and qualitative analyses, it is evident that significant progress is needed to accelerate the demographic transition in the short term in order to trigger the demographic dividend in the longer term. Without a faster and timely demographic transition, no demographic dividend can possibly be achieved.

Global evidence points to clear policy choices that have proven effective in catalyzing the demographic transition, especially the fertility decline: (1) programs that improve infant and child health, (2) programs that improve the uptake of family planning for child spacing and limiting, and (3) programs that increase educational attainment of girls. However, the adoption of evidence-based and comprehensive policies is not sufficient to realize success: attention must also be paid to the implementation of these policies. For this reason, this report also analyzed the policy space in the Sahel, considering the necessary factors for effective implementation of policies to achieve the demographic transition. The policy space was assessed with respect to policy design and adoption, translation, and implementation; some regional themes emerge.

The results indicate that the study countries have made substantial progress in designing policies to catalyze the demographic transition. Each country has already adopted a multisectoral population policy, addressing key determinants of population across areas such as health, education, gender, and youth. Designing and adopting good policies, however, is not sufficient to see success, and much remains to be done to ensure effective policy translation and implementation. On issues of policy design, there is room to expand the scope of the existing multisectoral and sector-specific policies. To facilitate translating these policies into successful implementation, action plans are needed to concretely address key aspects of implementation (e.g., financial resources, stakeholder support, organizational design, and monitoring for results).

Finally, several lessons concerning the implementation of policies emerged. First, strengthening appropriate institutions (new or existing) on these issues and resourcing them is critical. The analysis indicates insufficient financing and poor capacities, especially for carrying out some critical tasks and activities. Second, there is opportunity to increase the number and breadth of constituency groups in implementation—from policy endorsement to resource planning, program activities, and monitoring. Third, countries need to strengthen technical capacity on population issues and data analysis. And finally, there is scope to strengthen monitoring and evaluation (M&E) for program monitoring.

GOING FORWARD: SHORT-, MEDIUM- AND LONGER-TERM ACTIONS

The analyses presented in this report explored the possible reasons why the region has not been able to accelerate its demographic transition, why some countries are experiencing a stagnation or even an increase in fertility, and what needs to be done to address this. A clear package of actions emerges from the report that should be implemented if countries are to seriously tackle the demographic challenges that are central to social and economic development in the subregion. Although some elements of the package will need country-specific adaptation, the broad themes are consistent across the countries studied. The following short-term, medium-term, and longer-term actions by sector are proposed to accelerate the demographic transition and harness the demographic dividend (see Table E1). In the short term, catalyzing the fertility transition is critical. The medium-term actions focus on ensuring that girls are educated and women are empowered. In the longer term, the focus is on jobs, pensions and savings.

Table E1: Actions to Accelerate Demographic Transition

Table E1: Actions to Accelerate Demograp SHORT TERM	MEDIUM TERM	LONG TERM
	Health	
 Integrate family planning services into existing health and nutrition services and ensure youth-friendly service provision. An integrated approach reduces service delivery costs as well as opportunity costs and enhances access for women and young people. This may require building capacity of health providers. Strengthen community-based distribution of family planning methods and health technologies for children (e.g., vaccines, ORS, nutritional support, antimalarials) via existing health systems. Develop social marketing SBCC strategies on issues of early marriage; early childbearing; child spacing; investing in children; RMNCHN. 	 Facilitate community-level SBCC and media campaigns on RMNCHN issues. Introduce vouchers or other mechanisms to reduce cost barriers to RMNCH and nutrition services, especially for vulnerable groups and the poorest. Strengthen community-based distribution of family planning methods and health technologies by training community health workers, midwives, and community agents. 	Introduce vouchers or other mechanisms for preventive/routine child health and nutrition services.
	Education	
 Provide in-kind financial incentives for girls' schooling (e.g., uniform subsidies, school canteens, take-home food rations). 	 Strengthen infrastructure and improve quality of education. 	 Change policies about required number of years for primary schooling.
- Design programs with rigorous evaluation designs to assess girls' participation in schooling.	- Focus efforts to attract and keep girls in primary and secondary school (e.g., conditional cash transfers, fee subsidies, transport vouchers) for vulnerable and poorest households).	

Labor

- Create jobs that can take advantage of the decline in dependency ratio and the improvement in human capital.
- Implement policies that encourage savings and strengthen the financial sector.
- Implement interventions to promote financial literacy and entrepreneurship, especially for women, to enable populations in this subregion to access new opportunities, including those for savings and credit in the formal sector.

Multisector

 Expand youth programs to include health, family planning, and education topics. Life skills activities combined with economic and livelihood activities could be programmed together.

Note: ORS = oral rehydration solution; RMNCHN = reproductive, maternal, newborn and child health and nutrition; SBCC = social and behavior change communication.

Three additional issues need consideration: Strong political commitment, short- and medium-term perspectives, and matching population dynamics to economic flexibility.

- **Political Commitment.** Countries that have been able to turn population dynamics into improved human capital and faster economic growth had to show strong political commitment, especially needed when deep cultural issues are present and influential, as in the Sahel. Moreover, the multisectoral nature of both the impact of population dynamics and the policies needed to support families to speed up the demographic transition will require strong leadership and coordination at the national level to ensure that actions are implemented across different arms of government in partnership with nongovernmental actors. All of short-, medium-, and long-term efforts require multisectoral actions that must bridge a substantial gap between policy design and policy implementation through (1) strengthened technical and managerial capacity of institutions, (2) broader engagement of stakeholders, and (3), most importantly, financing to meet the needs.
- Short- and Medium-Term Perspectives. The policies and actions outlined in this report include short- and medium-term returns to investments that are needed quickly. Some of the policies in education and health will not pay off quickly but are nevertheless critical for the eventual speeding up of the demographic transition. Successful programs will need to balance the time perspectives and short-term returns and results to create the political space for medium- and long-term returns.
- Economic Flexibility. While this report has mainly focused on the first stage of the process for achieving a demographic dividend—namely, accelerating the demographic transition—the dividend is not automatic. As noted in Part I and highlighted in the upcoming regional report on the demographic divided in Sub-Saharan Africa (Canning, Raja, and Yazbeck forthcoming), two additional issues need to be addressed if the change in the population structure is to lead to economic dividends: (1) the economy of a country needs to be able to create jobs that can take advantage of the decline in dependency ratio and the improvement in human capital, and (2) policies to encourage savings and strengthen the financial sector will ensure that, as the youth bulge moves into its earning years, their savings can fuel further economic growth.

The World Bank can deploy a variety of instruments ranging from investment lending, knowledge services (e.g., economic and sector work, technical assistance), capacity development grants, and policy instruments such as development policy loans and poverty reduction strategy credits to support countries in furthering this agenda. Each country will need to carefully consider what tools are most appropriate for their specific objectives and within their country contexts.

ABBREVIATIONS

ASFR Age-specific fertility rates
CCT conditional cash transfer

CONAPO National Population Council (Burkina Faso, Niger)

CPR contraceptive prevalence rate

CPSP Contraceptive Products Securing Plan (Burkina Faso)

DFID U.K. Department for International Development

DHS Demographic and Health Surveys

DGPP Government Population Policy Declaration (Niger)

ESW economic and sector work

IEC/BCC information, education, and communication/behavior change communication

IUD intrauterine device

PAP Population Action Plans (Burkina Faso)

PDES Economic and Social Development Plan (Niger)

PDS Health Development Program (Niger)

PISE Education Sector Investment Program (Mali)
PPIP priority investment programs in population

PNG-Mali Mali National Gender Policy

PNP National Population Policy (Burkina Faso, Côte d'Ivoire, Mali)

M&E monitoring and evaluation

MMR maternal mortality ratio

NDP National Directorate of Population (Mali)

NGO nongovernmental organization

NPO National Population Office (Côte d'Ivoire)

NYP National Youth Policy (Côte d'Ivoire)

RHSP Reproductive Health Strategic Plan (Côte d'Ivoire)

RMNCHN reproductive, maternal and child health and nutrition

SBCC social and behavior change communication

SNAEF National Strategy for Accelerated Girl Education (Burkina Faso)

TFR total fertility rate

UNDP United Nations Development Programme

UNFPA United Nations Population Fund

USAID U.S. Agency for International Development

PART 1 – INTRODUCTION AND CONTEXT

It is hard to find a topic in the Sahel that is more closely linked to overall development (economic and social) than population. The countries of this subregion have the fastest growing populations not only in Africa but in the entire world. This fast-growing population has a direct impact not only on the health of the populations (both mothers and children), but also on investments in education, women's empowerment, underemployment, poverty, and on the potential for political instability. In other words, demography at this stage of development of the countries of the Sahel is central to their development. Even more challenging is the fact that the relationships between population and all these social and economic indicators works both ways and are self-reinforcing. For example, investments in education are both a result of the number of children (a negative relationship) and a driver of decisions to have more children. The story of vicious or virtuous cycles with population is similar for child health and nutrition, maternal health, female labor entry, informal employment, female empowerment, and overall poverty. These critical linkages make the issues and policies around population in the Sahelian region central to country and regional development for the coming years.

This wider focus on population dynamics and the potential for a demographic dividend in the Sahelian region with its many ramifications is also what differentiates this report from previous work that has focused only on the health sector. Furthermore, this analysis goes beyond making the case for addressing the demographic transition: it presents specific time- and order-sensitive policy recommendations across different sectors that can improve the prospect for each of these countries to capture the dividend and escape a demographic disaster.

THE DEMOGRAPHIC DIVIDEND

The discussion concerning population up to this point has focused mainly on family planning and, more recently, the potential negative societal and developmental impacts of a slow demographic transition. This report takes a different approach by highlighting the fact that a faster demographic transition could produce important positive returns to countries. A country's population is its most important resource, so any policy action that positively impacts the health, nutrition, and education of a country helps strengthen the human capital in that country. A fast demographic transition can help achieve a human development dividend, but there is more. A rapid demographic transition can lay the foundation for a country to capture a demographic dividend.

The expression "demographic dividend" was first used in the late 1990s to explain part of the impressive economic growth in some East Asian economies such as the Republic of Korea and Singapore (sometimes referred to as the *Asian Tigers*). A *demographic dividend* refers to the gains in economic growth that could be attributed in large part to sustained change in the age structure of the population that result from declines in mortality followed by declines in birth rates. Figure 1.1 shows these two processes (decline in child mortality followed by a decline in fertility), which together constitute a demographic transition.

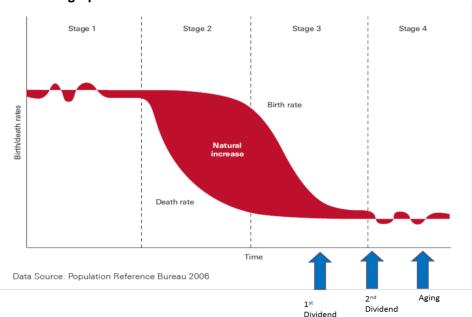
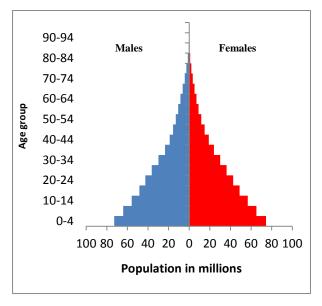


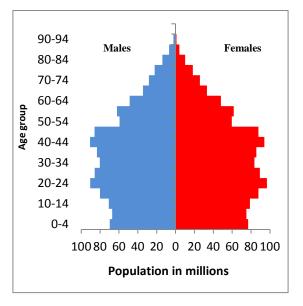
Figure 1.1: The Demographic Transition

Source: Population Reference Bureau 2006 data.

Every country in the world has undergone or is currently undergoing this natural phenomenon (demographic transition), but each achieves this at its own speed. The speed with which this transition takes place has a critical impact on a population's age structure. In the Asian Tiger countries, the transition was fast; this led to the emergence of a population age structure characterized by a "youth bulge" (Figure 1.2). In other words, a rapid transition creates an age structure in the population where a large share of the population enters the labor market together or within a short period, creating a large increase in household and national income is known as the *first economic demographic dividend*.

Figure 1.2: Population Pyramids of Sub-Saharan Africa and East and Southeast Asia
1.2a: Sub-Saharan Africa 2012
1.2b: East and Southeast Asia 2012





Source: United Nations Department of Economic and Social Affairs, Population Division 2011

A large increase in the percentage of the population who are of working age, however, is necessary but not sufficient to achieve the economic benefit of the demographic transition: the first economic demographic dividend is not automatic even if the demographic transition is speeded up. What is needed to turn the favorable age structure changes into economic growth is jobs. As was discovered in a number of countries in North Africa and Latin America, achieving the age structure changes alone was not enough, and it failed to translate into the first dividend when the economies of these countries were not able to create enough well-paying jobs to absorb the youth cohort.

A second potential economic demographic dividend can also be achieved with appropriate economic and financial policies. As Figure 1.2 shows, the youth bulge means that the group that follows it is much smaller in number, and as the bulge group ages, the younger cohort will be smaller in number and percentage. The *second economic dividend* is captured when the youth bulge starts to earn more and starts (or is encouraged) to save for retirement. Savings then translates into investments, which produce the second economic divided.

Efforts to address these issues in the past have focused on single issues such as those in the health sector. This report takes a different approach in that a wider range of relevant policies and programs are identified as necessary to catalyzing the demographic dividend. This wide range of policies and programs makes it challenging for a single line ministry to tackle it as a project on its own. The spectrum of policies that have proven to be effective in other African countries and other parts of the world range from the relatively simple service delivery focus on family planning to those addressing the wider issues around girls' education and women's empowerment as well as legalistic and societal issues around the age at marriage, legal rights for women, and labor market opportunities for both men and women. A carefully prioritized and well-financed multisectoral policy and service delivery response that cuts across several key line ministries and has high-level commitment and leadership is critical to ensuring that countries not only address their development challenges but also benefit fully from the human potential of their populations.

Sources and Speed of Population Growth

A key element of the impact of population growth on social and economic development is how this growth in population is coming about. A population growth that is the natural result of improvement in health and declines in mortality has a very different impact from one that is caused primarily by high fertility levels. For example, there is strong biological evidence that population growth driven by high fertility rates has a detrimental impact on both children and mothers. Specifically, pregnancy and birth for a young mother, especially one from a disadvantaged background, as well as short birth spacing between children, increases the risk of morbidity and mortality for the mother and child. Another important dimension of the source of population growth is its impact on population age structure and therefore on dependency ratios and labor potential. A population growth fueled mainly by high fertility produces—and maintains for a long time—a flatter population pyramid, which increases the dependency ratio and diminishes the ratio of the population that is of working age. Therefore a population growth rate that is mainly due to high fertility rates has a long-lasting negative impact on social and economic development in at least two areas: health and labor.

The speed of the population growth is also a key factor. Fast improvements in health and fertility have a very different impact from a slow decline in health and fertility. A slow decline in fertility (or in some cases no decline at all) has devastating effects on critical human capital development in a country. First, when health and fertility declines are slow, children are likely to have worse health and nutritional status, thereby impacting their long-term survival, cognitive development, and labor productivity. High fertility also affects the health of mothers, the investment in children's education and in nutrition, and their potential entry into the formal labor market. High fertility directly affects the size of public and private investment in child education and a country's ability to build lasting human capital. In terms of system needs, high fertility puts more pressure on both health and education systems, two systems that are usually weak in low-income countries. Fast population growth fueled by slow fertility declines also negatively affect health and education, limiting the growth of human capital and adding pressure on already-weak social systems.

As noted earlier, failure to tackle this lack of decline quickly not only jeopardizes the countries' ability to benefit from the demographic dividend, but also adds tremendous pressure on the economy for generations to come and puts countries at economic, security, and political risk. Every country in the Sahel region has the opportunity to take advantage of the demographic transition. Being the last region in the world to undergo this transition, the countries of the Sahel also have the opportunity to learn from the successes around the world (e.g., the experiences of the East Asian Tigers) and from the failures (the inability for large parts of Latin America, North Africa, and the Middle East to capture a demographic dividend).

Demography can be destiny—but each country, through its own policy actions, can choose how the story ends.

GENESIS AND OBJECTIVE OF THIS REPORT

An upcoming regional (Sub-Saharan Africa) report on the potential for a demographic dividend (Canning, Raja, and Yazbeck forthcoming) lays out a policy framework for countries that want to ensure that the structural transformation of their populations produces positive economic and social outcomes. The regional report highlights a number of facts that triggered interest in the Sahel/West Africa region:

- 1. The Sahel region includes countries with the highest rates of fertility in the world (e.g., Burkina Faso, Chad, Mali, and Nigeria).
- 2. In some of these countries, the fertility transition has not started despite improvements/declines in mortality.
- 3. The demand for children in many countries in this region remains fairly high relative to other regions in Africa.

The regional report also lays out a challenging picture for the countries in Africa that have not been able to speed up their demographic transition, and it highlights the extreme heterogeneity in the fertility transitions' speed across the continent. Both West and East Africa have countries that have stagnated in the fertility

decline, but East Africa also contains countries that have been able to accelerate the fertility decline for the last 10 years, more so than West Africa. This finding triggered interest among the World Bank Country Teams covering two West Africa clusters to request further analytical work that digs deeper than the regional report could. This current report has a special focus on the fertility part of the story, which has proven more challenging than the mortality declines in this subregion.

The objective of this economic and sector work (ESW) is to understand the nature of the demographic transition and its drivers and map out policies that can help or hurt the potential capture of the demographic dividend for Sahel countries. This is especially critical for many, if not most, Sahel countries given the stagnation in the decline of their fertility rates. This analysis goes beyond making the case for addressing the demographic transition to presenting specific time- and order-sensitive policy recommendations across different sectors that can improve the prospect for each of these countries to capture the dividend and escape a demographic disaster. In an operational way, the focus of this work is on the "how to" from a policy and program perspective.

POPULATION, THE WORLD BANK, AND PARTNERSHIPS

The World Bank recognized the importance of population to development in the late 1960s and early 1970s. In fact, the first nine projects that the World Bank financed in the sector referred to as Health, Nutrition, and Population (HNP) were population projects (Jamaica in 1970, Tunisia and Trinidad and Tobago both in 1971, Indonesia in 1972, Iran in 1973, Kenya and Egypt in 1974, and the Philippines and Bangladesh in 1975). Motivating this focus on and support for population issues was a strong analytical work linking population dynamics to overall development.

Over time, however, the focus on population in both analytical work and lending began to dissipate, to be replaced by a stronger focus on health outcomes and investments in health systems. This was not unique to the World Bank; the global donor focus shifted from family planning to HIV/AIDS and other priorities. After the Cairo Convention on reproductive health, the World Bank shifted its support from standalone population projects in recognition of the importance of integrating family planning programs into wider health and reproductive health approaches. More recently, support for elements of family planning has come through innovative approaches such as results-based financing of health projects and demand-side interventions such as conditional cash transfers through social protection projects. The appropriate shift from standalone family planning projects to integrated health programs was accompanied by a drop in the attention paid to population as a larger developmental issue. As population became more integrated into sectoral programs (health), attention to the multisectoral impact of population dynamics and its link to social and economic development were diminished.

The last five years, however, have seen increased focus on demographic dynamics within the World Bank, emphasizing thinking about population through the wider developmental lens. Led by regions that represent middle-income countries, mainly Europe and Central Asia as well as Latin America, population—largely seen through population aging—the World Bank is again taking a central role in development discussions and strongly increasing investment in analytical and programmatic activities. The forthcoming Sub-Saharan Africa regional report noted earlier focuses more on the implications of very young populations in low- and low-middle income countries.

The World Bank's stepping away from supporting vertical population programs and from asserting the centrality of demography in development did not fully represent a larger global move away from this topic, although, as mentioned earlier, there was a global shift. In fact, a diverse group of development agencies have taken the lead on population and support for family planning in Africa and in other low-income regions. This group includes important bilaterals such as the U.K. Department for International Development (DFID), the French Development Agency, and the U.S. Agency for International Development (USAID). The group also includes important UN agencies such as the United Nations Population Fund (UNFPA) and foundations such as the Bill and Melinda Gates Foundation, the Hewlett Foundation, and the Packard Foundation.

The reengagement of the World Bank on this topic, along with the strong support from other partners, represents a unique opportunity to address a critical developmental challenge and opportunity. The World Bank's comparative advantage in this area is the multisectoral nature of the work and its ability to work

with country clients on wider policy issues that sector-specific attention cannot tackle. As noted earlier, population dynamics have multisectoral impacts, but these need to be influenced by actions in many sectors.

METHODOLOGY

This sector work focuses on the eight countries that represent two World Bank country units, AFCW3 and AFCF2 (Benin, Burkina Faso, Côte d'Ivoire, Togo, Chad, Guinea, Mali, and Niger). At the concept note review stage it was decided that, while the report will inform all eight countries, given budget and time limitations, analytical work will focus on four countries that are representative in nature and offer the range/heterogeneity of outcomes most useful for building a robust policy framework. Building on the work of a regional report on the demographic dividend (Canning, Raja, and Yazbeck, forthcoming) and on an active global research and advocacy movement, the main approach of this ESW was to customize and adapt from existing regional knowledge for country-focused policy actions and matching operational instruments. In other words, this ESW does more than make the case for addressing the demographic shift—it also presents specific time- and order-sensitive policy recommendations across different sectors that can improve the prospect for each of these countries to capture the dividend and escape a demographic disaster. This works focuses the "how to" from a policy and programmatic perspective.

To achieve this objective, the team (1) captured and customized the evidence from the regional report and other global efforts, (2) investigated and captured the status of impactful policies across the relevant sectors for countries to move toward a dividend, (3) laid out specific opportunities for policies, (4) laid out how the World Bank and other development partners can support countries through the different learning and lending instruments, and (5) developed a communication strategy that addresses the multisectoral benefits of the demographic dividend as well as the multisectoral policies needed to capture it.

Specific actions/analysis included:

- 1. Country-specific analysis of the direct, proximate, and social determinants of the fertility in a select number of priority countries.
- 2. Country-specific qualitative analysis to explore social and cultural factors that influence the high demand for children in target populations.
- Country-specific mapping of the status of policies, implementation of policies, and relative size of
 public investments, relating the known cost-effective policies and investments (from the global
 literature and from the findings of the Sub-Saharan Africa demographic dividend study underway).

West Africa consultants and African institutions were identified, contracted, and—where needed — twinned with global experts to produce the results within the time frame for this ESW. The results of these three analytical products were combined to identify and recommend country-specific actions for accelerating the demographic shift to achieve the demographic dividend. Details on the frameworks and the data collection and analysis techniques used can be found in Appendix 1.

PART II – THE DEMOGRAPHIC PICTURE: QUANTITATIVE ANALYSIS

Countries in the Sahelian region form a complex mix of countries ranging in size from some of the smaller countries in Sub-Sahara Africa such as Benin, Guinea, and Togo to some of the larger countries such as Chad, Mali, and Niger. There is also a wide range in terms of population density, with countries such as Chad and Mali having some of the lowest and Benin, Burkina Faso, and Côte d'Ivoire having some of the highest population densities in Sub-Saharan Africa. Despite these differences, they share some common features and trends, including having some of the youngest populations in the world. The demography of this region is one of the key features of the development challenges facing it.

POPULATION SIZE AND RATES OF GROWTH

The population of the eight countries considered in this study (Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Mali, Niger, and Togo) ranges from about 6 million people in Togo to 19.7 million in Côte d'Ivoire. All these countries have seen rapid growth in the last 50 years, although their rates of population increase vary widely. For example, while Benin's population has grown from about 2.2 million people in 1950 to about 9 million in 2010, during the same period Côte d'Ivoire's has grown from about 2.6 million people to almost 20 million (see Table 2.1 for population estimates). It is also true that population growth rates have varied greatly in the past decades, especially in the 1950s, 1960s, and all the way through the 1990s. Most countries had population growth rates of 3 percent or more in the 1980s, with Guinea observing 5.3 percent in 1990–1995 after very low rates of growth in the 1970s. Because of continuing high rates of population growth, the coming decades are projected to see massive growth in countries such as Niger and Mali, which projected growth rates above 3 percent up to 2025–2030. Niger is projected to be among the most densely populated countries in the world in the next 50 years. While most other countries in the group are projected to see slower population growth rates in the future, the high rates of growth in Niger are forecast to continue well into the 2050s.

Table 2.1: Population Estimates: Actual and Projected

						Population projections: All variants							
Country		Actu	al*			('0							
		1950*	1970*	2000*	2010*	2030	2050	2070					
Benin	Medium variant	2,255	2,850	6,518	8,850	14,630	21,734	28,904					
	Low variant	2,255	2,850	6,518	8,850	13,932	19,284	23,347					
	High variant	2,255	2,850	6,518	8,850	15,329	24,340	35,301					
Burkina	Medium variant	4,284	5,807	12,294	16,469	26,564	40,932	56,362					
Faso	Low variant	4,284	5,807	12,294	16,469	25,360	36,508	45,874					
	High variant	4,284	5,807	12,294	16,469	27,771	45,618	68,338					
Chad	Medium variant	2,429	3,656	8,222	11,227	18,437	27,252	35,587					
	Low variant	2,429	3,656	8,222	11,227	17,600	24,207	28,694					
	High variant	2,429	3,656	8,222	11,227	19,276	30,494	43,559					
Côte	Medium variant	2,630	5,416	16,582	19,738	29,823	40,674	49,623					
d'Ivoire	Low variant	2,630	5,416	16,582	19,738	28,256	35,655	39,221					
	High variant	2,630	5,416	16,582	19,738	31,394	46,056	61,825					
Guinea	Medium variant	3,094	4,154	8,344	9,982	17,322	24,466	30,710					
	Low variant	3,094	4,154	8,344	9,982	16,487	21,656	24,634					
	High variant	3,094	4,154	8,344	9,982	18,159	27,459	37,733					
Mali	Medium variant	4,638	6,034	11,295	15,370	26,784	42,130	59,009					
	Low variant	4,638	6,034	11,295	15,370	25,621	37,719	48,360					
	High variant	4,638	6,034	11,295	15,370	27,951	46,794	71,117					
Niger	Medium variant	2,462	4,373	10,922	15,512	30,841	55,435	87,786					
_	Low variant	2,462	4,373	10,922	15,512	29,606	50,183	73,573					
	High variant	2,462	4,373	10,922	15,512	32,078	60,956	103,711					
Togo	Medium variant	1,395	2,097	4,794	6,028	8,684	11,130	12,800					
_	Low variant	1,395	2,097	4,794	6,028	8,211	9,703	9,994					
	High variant	1,395	2,097	4,794	6,028	9,159	12,665	16,120					

Source: United Nations Department of Economic and Social Affairs, Population Division 2011

POPULATION DYNAMICS AND STRUCTURE

Projected population sizes are all heavily dependent on fertility assumptions embodied in the projections. For all eight countries, the difference of one child between low and high variants produces very different projected population sizes. For example, the low variant projection for Chad suggests a population size of 28.7 million by 2070 compared to 43.6 million from the high variant. For Mali, the low variant projects a population of 48.4 million people by 2070 compared to 71.1 million under the high variant. These large differences in projected population sizes reflect large cohorts from previous high levels of fertility as well as ongoing high rates of fertility in these societies.

Total fertility rates (TFRs—the average number of children born to a woman over the course of her lifetime) remain high in these eight countries in comparison to other countries in the Africa region, and—despite declines in fertility after the 1980s (with exception of Niger)—current TFRs range between 4.4 and 7.2 (see Figure 2.1). Prior to the 1980s, the Sahel region saw a very slow decline in fertility and actually experienced an increase in fertility for most of the 1970s peaking in the 1980s for most of the eight countries. Côte d'Ivoire, on the other hand, experienced a decline in fertility in the early and mid-1970s. Data after the 1980s show very slow declines in fertility in these countries between the1980s and 2010; a number of countries show stagnation in their transition toward lower fertility, and some even saw

increases in fertility during some periods. Age-specific fertility rates (ASFR) show a very young pattern of fertility—that is, women start bearing children very early, and so the ASFR distributions are skewed toward younger ages with a peak in the 20–24 age group; a significant amount of child bearing still occurs in women older than 30 years.

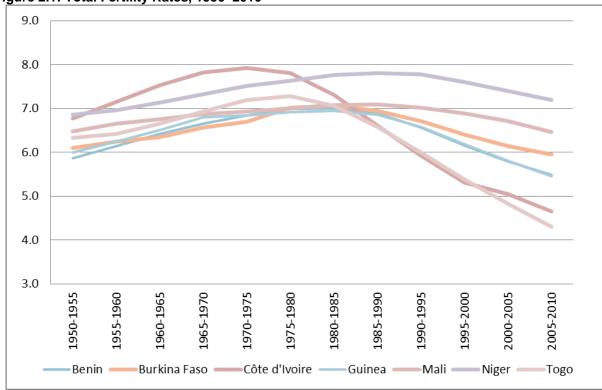


Figure 2.1: Total Fertility Rates, 1950-2010

Source: United Nations Department of Economic and Social Affairs, Population Division 2011.

Life expectancy at birth remains very low across the board (Figure 2.2). Life expectancy at birth is still in the low 50s in Chad and Côte d'Ivoire and in the mid-50s in countries such as Burkina Faso and Mali. No country in the group studied has a life expectancy at birth above age 60. Projections suggest that improvements in life expectancy will be very slow, and even by 2070 projections suggest that life expectancy at birth will still be lower than current levels in developed countries. Life expectancy at later ages is also quite low: for example, the probability of dying between age 15 and 60 is quite high—it is about 129 per 1,000 population for more developed regions in the period 2005–2010 compared with 409 for Chad; 261 and 292 for Benin and Burkina respectively; and 439 for Côte d'Ivoire. As in other regions of the world, infant mortality rates are declining, though they are mostly still above 50 deaths per 1,000 births, rates are fewer than 100 deaths per 1,000 births. Under-five mortality rates suggest an improvement as these are also downward, though rates are mostly still above 100 per 1,000 children, but fewer than 150 for the countries of focus in this study. Maternal mortality rates are also showing mostly downward trends; however, data suggest stagnation in Chad since 2000 at about 1,100 deaths per 100,000 births. In general, data show wide variability in maternal mortality ratios (MMRs), ranging from about 300 deaths per 100,000 births to more than 600 in Guinea.

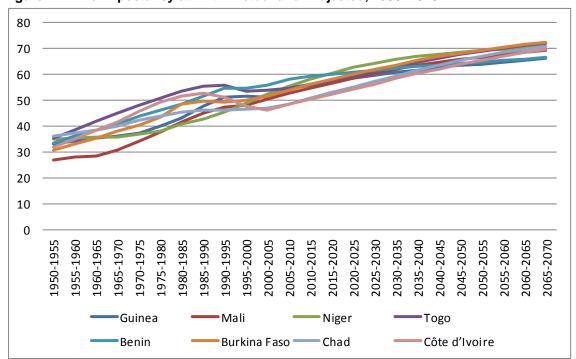


Figure 2.2: Life Expectancy at Birth: Actual and Projected, 1950–2070

Source: United Nations Department of Economic and Social Affairs, Population Division 2011.

The subregion is home to some of the youngest countries in the world. There is diversity in the group of eight countries: mMedian ages are all between 15 (Niger and Mali are 16.2; Chad is 15.9) and 19 years (e.g., Togo), and projections do not suggest that these countries' populations will age much in the next decades. Niger's median ages are projected to remain essentially flat for the next couple of decades (because growth rates are projected to remain high, mostly because of continuing high fertility). Even of those countries that will see increases in their median ages, none is projected to have a median age above 30 years by 2070 (Guinea and Togo are projected to be very close to 30 years). Because of high rates of fertility in previous decades, median ages in the middle of the 1990s were in some cases lower than those in 1950, but they have started rising again in the last decade.

These very young median ages of the population reflect population structures predominantly composed of children. In Côte d'Ivoire and Mali, for example, around 20 percent of the populations are made up of children aged 0–14; this proportion has been stable for a number of decades and is not expected to change dramatically in the next few decades. On the other hand, about 50 percent of Niger's population is in this age group, and this is projected to remain more or less at this level for the coming decades. Between 40 and 47 percent of the populations of the remaining countries studied are composed of children, and these percentages are projected to decline to between 25 percent and just under 30 percent of the total populations by 2070. As fertility rates move downward over time, a smaller proportion of the populations will be composed of children.

The proportion of the population in the 15–24 age group stands at about 20 percent for all countries analyzed apart from Mali, Niger, and Togo, which currently have smaller proportions in these age groups. For most countries, the projected trend is for a smaller proportion of the population to be in this age group in future decades; the exception is Niger, which is projected to see an increase in this group in relation to other age groups. Also the proportion of Niger's population who are 15–59 years old is the lowest of the countries studied—only 45.7 percent—compared to 54 percent in Togo and Côte d'Ivoire, for example. These proportions of the population aged 15–59 are generally increasing for all countries, though slowly, and they are projected to increase to slightly more than 60 percent by 2070—again with the exception of Niger, which will have about 57 percent of its population in this age group by 2070.

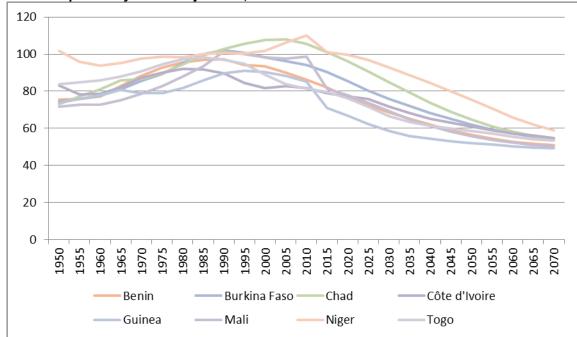


Figure 2.3: Dependency Ratio Projections, 1950–2070

Source: United Nations Department of Economic and Social Affairs, Population Division 2011.

Data show that dependency ratios peaked about 10 years ago for some countries, though for Niger the peak occurred in 2010 at about 110.1 dependents per persons of working age (Figure 2.3). Dependency ratios are still quite high for some of the other countries studied here; they are currently about 100 for Niger and Chad and very close to 100 for Burkina Faso and Mali. They will remain much higher than for other countries in Sub-Saharan Africa for a long while during the period leading to 2070, though at levels lower than then previously observed in the 1970s to 1990s.

DETERMINANTS OF HIGH FERTILITY IN THE REGION

High fertility has played an important role in determining population growth rates and shaping the population structures and dependency ratios described above. Data from Demographic and Health Surveys (DHS) show that fertility continues to be high in these countries because of a number of factors that include the following: (1) very young ages at first marriage and almost universal marriage; (2) an early age at first sexual debut and age at birth of first child; (3) low levels of use of modern methods of family planning; and (4) the desire for large families, which remains high.

Median age at first sex, first marriage, and first birth are in general quite young. By age 20, more than 50 percent of the women in these countries have experienced all of these events. Age at first marriage ranges from 15.5 years in Niger (Niger 2006 DHS) and 15.9 in Chad (2004) to 16.6 in Mali; in general there has been slow increase in age at first marriage across the countries analyzed for this study. Age at first sex is closely linked to marriage, as the two occur in close proximity in Chad and Niger. In Côte d'Ivoire, women are older at their first marriage and older at their sexual debut. Also important is that median ages at first births are also quite early. In the group studied, Niger demonstrates comparatively the lowest median age at first birth in all age groups.

There are important socioeconomic differences in median ages at first sex, first marriage, and first birth; these are not surprising and resemble patterns in other regions of Sub-Saharan Africa. They show that rural women are entering marriages earlier than urban women, as do those from households with the lowest wealth index and those with the lowest levels of education (Table 2.2). Data suggest that the gap in

median ages at first marriage between urban and rural women seem to have increased over time because first marriage ages in urban areas have increased more quickly than in rural areas. Differences in median age at first birth by levels of education also indicate a higher median age among those with at least a secondary level of education. The gap between those with no education and those with at least secondary education is higher than the gap between the richest and the poorest.

Table 2.2: Median Age at First Marriage (Age Group: 25-49)

		Burkina Faso				Côte d'Ivoire Mali					Niger			Chad		
			1998-				1998-		1995-						1996-	
		1993	1999	2003	2010	1994	1999	1987	1996	2001	2006	1992	1998	2006	1997	2004
Characteristic		DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS	DHS
All women 25–49		17.5	17.6	17.7	17.8	18.1	18.7	15.7	16.0	16.5	16.6	14.9	15.1	15.5	15.8	15.9
Residence	Urban	17.9	18.6	19.0	19.2	18.8	19.8	15.8	17.0	17.5	17.3	15.4	15.8	16.7	16.0	16.2
	Rural	17.5	17.6	17.6	17.6	17.8	18.2	15.6	15.8	16.2	16.3	14.8	15.0	15.4	15.8	15.8
Household wealth index	Lowest	17.5		17.4	17.4	17.4	18.0	_	15.8	16.1	16.4	_	15.0	15.4	15.6	15.5
	Second	17.4	_	17.5	17.5	17.8	18.4		15.9	16.1	16.4	_	15.0	15.3	15.7	15.9
	Middle	17.4		17.7	17.7	18.0	18.4	_	15.8	16.0	16.4	_	15.0	15.4	15.9	16.1
	Fourth	17.4		17.7	17.8	18.1	18.6	_	15.9	16.4	16.2	_	15	15.5	16.0	15.8
	Highest	17.9		18.7	19.3	19.8	20.3	_	17.4	18.1	17.8	_	15.8	16.3	16.0	16.1
Highest education level	No education	17.5	17.6	17.6	17.6	17.7	17.9	_	15.9	16.1	16.4	14.8	15	15.4	15.7	15.7
	Primary	17.8	18.0	18.3	18.4	18.4	19.3	16.4	16.6	17.1	17.1	15.8	15.9	16.5	16.5	16.7
	Secondary or higher	21.5	23.2	23.0	22.2	21.4	22.5	21.2	20.5	21.8	20.3	20.4	20.5	21.5	17.9	18.5

Source: Demographic and Health Surveys (DHS), various years.

Note: Median age shows the age by which 50 percent of the women 25–49 years of age had gotten married.

— = not available.

DEMAND FOR CHILDREN AND CONTRACEPTIVE USE

The ideal number of children remains high in the region, even among women with higher levels of education or those in urban or from wealthier households. DHS data show that on average, the majority of women in six of the eight countries want to have more than five children; the desired number of children is more than eight in Chad and Niger (Table 2.3).

The results also reveal that the percentages of women who want to bear more children decreased over time in two of the five countries in the table, but not in Burkina Faso, Mali, and Niger. Desire to limit childbearing is low, but the data show a sizeable proportion of women who desire to limit the number of children (spacing rather than limiting). Higher percentages of women in urban areas have a desire to limit child bearing than rural women. Results on socioeconomic status show that the percentage of mothers who want to stop child bearing increased with increased socioeconomic status; also data show an increase in the percentages of mothers who want to stop child bearing as their education level increased. As the age of the mother increases, as expected, the desire to stop child bearing also increases. There are also important differences by religion, though the analysis of the data does not find a consistent pattern or direction in all countries. Christians had the highest proportion of mothers who desire to stop child bearing. Mothers who practiced traditional and other religions had the lowest percentage who reported a desire to stop child bearing. A higher percentage of women with more children want to stop child bearing than those with fewer children (Table 2.4). This pattern is consistent in all the eight countries. Results also show that the desire to stop child bearing increased over time especially as parity increases.

Table 2.3: Mean Ideal Number of Children by Mothers' Characteristics

			Burkina	a Faso		Côte	d'Ivoire		Ма	ali			Niger		Ch	ad
Characteristic		1993 DHS	1998– 1999 DHS	2003 DHS	2010 DHS	1994 DHS	1998– 1999 DHS	1987 DHS	1995– 1996 DHS	2001 DHS	2006 DHS	1992 DHS	1998 DHS	2006 DHS	1996– 1997 DHS	2004 DHS
All		5.7	5.7	5.5	5.6	5.5	5.4	6.9	6.6	6.2	6.3	8.2	8.2	8.8	8.9	8.3
Residence	Urban	4.3	4.2	4.3	4.2	4.7	4.6	5.7	5.6	5.2	5.8	6.5	6.3	7.1	7.7	7.4
	Rural	6.2	6.1	6.0	5.9	6.1	5.9	7.3	7.1	6.8	6.6	8.6	8.7	9.2	9.2	8.6
Household wealth index	Lowest	6.6	6.6	6.6	6.5	6.6	6.5	_	7.9	6.8	6.8	_	9.0	9.4	9.1	8.8
	Second	6.2	6.1	6.1	6.1	6.1	6.1	_	7.1	6.8	6.8	_	8.7	9.3	9.0	8.6
	Middle	6.6	6.2	5.8	5.8	5.7	5.6	_	6.8	6.8	6.6	_	8.6	9.0	9.3	8.6
	Fourth	5.6	5.6	5.4	5.5	5.1	4.8	_	6.3	6.4	6.3	_	8.6	9.0	9.3	8.2
	Highest	4.4	4.4	4.3	4.3	4.4	4.3	_	5.3	5.0	5.3	_	6.4	7.4	7.7	7.4
Highest education level	No education	6.1	6.0	6.0	5.9	6.1	6.0	7.2	6.9	6.6	6.6	8.5	8.6	9.1	9.4	8.8
	Primary	4.6	4.8	4.7	4.6	4.9	4.9	5.9	5.7	5.8	5.7	6.7	6.8	7.6	7.7	7.2
	Secondary+	3.6	3.5	3.7	3.6	4.1	3.9	4.0	4.5	4.4	4.7	4.7	5.2	6.0	6.0	5.7

Source: Demographic and Health Surveys (DHS), various years.

Table 2.4: Percentage of Mothers Who Desire to Limit Birth by the Number of Living Children

Children									
	DHG	0	1	2	3	4	5 ah:1dwan	6+	TF-4 1
Country	DHS vear	children (%)	Total (%)						
Country	2006	(/0)	(/0)	(/0)	(/0)	(/0)	(/0)	(/0)	(/0)
Benin	DHS	0.4	1.6	8.5	18.9	34.6	50.3	62.8	27.2
201111	2001	***	-10						
	DHS	0.2	2.2	9.4	14.9	37.6	43.1	63.9	25.9
	1996								
	DHS	1.0	1.3	5.3	14.5	25.1	38.5	58.6	23.0
Burkina	2010								
Faso	DHS	0.4	1.7	5.7	13.7	28.0	40.2	61.8	23.7
	2003	0.7	1.0	5 0	140	26.4	20.1	<i>(5.2)</i>	22.1
	DHS 1998–	0.7	1.2	5.8	14.0	26.4	38.1	65.3	23.1
	1998– 1999								
	DHS	0.3	1.6	7.0	10.9	19.8	30.7	54.6	19.6
	1993	0.0	1.0	,	10.5	17.0	2017	0	17.0
	DHS	0.8	2.2	4.5	12	21.7	31.6	56.2	19.1
	2004								
Chad	DHS	0.9	1.2	2.8	4.2	6.6	10.9	22.6	8.4
	1996–								
	1997	0.6		1.7	~ .	0.0	161	20.7	10.0
	DHS	0.6	1.1	1.5	5.4	9.9	16.1	29.7	10.0
Côte	1998– 1999								
d'Ivoire	DHS	1.1	1.2	4.2	13.8	24.3	35.0	59.5	20.7
u Ivone	1994	1.1	1.2	1.2	15.0	21.3	33.0	37.3	20.7
	DHS	0.0	2.0	7.2	11.8	20.8	36.2	57.1	21.6
	2005								
Guinea	DHS	2.0	3.5	6.7	12.9	23.9	40.5	59.8	21.9
	1999				4.				• • • •
	DHS	1.7	3.5	5.9	12.8	24.9	41.7	57.8	20.9
Mali	2006 DHS	1.4	2.3	7.0	11.1	21.2	34.1	52.8	19.5
Man	2001	1.4	2.3	7.0	11.1	21.2	34.1	32.0	19.5
	DHS	2.0	2.8	7.4	9.6	23.3	32.9	56.3	21.5
	1995–								
	1996								
	DHS	1.1	1.8	3.9	10.6	19.3	27.6	52.1	18.7
	1987						• • • •	4.	
	DHS	3.6	4.2	7.6	14.6	22.2	28.0	42.0	16.5
Nicon	2006 DHS	1.4	1.0	3.0	4.3	5.3	11.8	26.2	8.9
Niger	1998	1.4	1.0	3.0	4.3	3.3	11.0	26.3	0.9
	DHS	0.8	0.6	3.0	4.7	8.4	14.0	32.4	9.6
	1992	0.0	0.0	3.0	,	0.1	1110	32.1	7.0
	DHS	1.4	2.5	4.2	5.8	8.3	11.8	29.9	9.0
	1998								
Togo	DHS	1.7	2.1	11.7	22.0	37.4	43.7	67.9	28.6
	1988					_			
	DHS	1.4	1.2	4.8	13.6	26.6	45.4	65.2	25.0

Source: Demographic and Health Surveys (DHS), various years.

Contraceptive use remains low across the region. Only about 25 percent of women use modern methods in Burkina Faso, as reported in the 2010 DHS. There are stark differences between women in urban and rural areas and also by levels of education attained by the women. Data show the majority of the women who use contraceptives get them from public health facilities, though private health facilities and other private sources together are significant proportion of the sources of contraceptives (Table 2.5). Results also show that Christians have the highest level of contraceptive prevalence rate (CPR), compared with Muslims and those who practice traditional or other religions. The CPR levels for each religious group increased over time. Results show that opposition by the respondent, fear of side effects, wanting more children, and infecundability are the main reasons that women fail to use contraceptives.

Table 2.5: Sources of Modern Contraceptive Methods

			Private			Unknown or
Country	DHS year	Public	medical	Other private	Other	missing
Benin	2006 DHS	42.1	34.7	19.1	1.8	2.3
Burkina						
Faso	2010 DHS	73.7	11.4	12.6	0.3	2.0
Chad	2004 DHS	60.0	12.8	24.1	3.1	0.1
Côte						
d'Ivoire	2011-2012 DHS	26.3	45.7	15.3	9.2	3.5
Guinea	2005 DHS	35.8	19.3	18.8	25.0	1.1
Mali	2006 DHS	51.9	36.9	7.0	2.1	2.1
Niger	2006 DHS	67.4	24.1	6.2	0.3	2.0
Togo	1998 DHS	48.0	14.8	35.8	0.2	1.2

Source: Demographic and Health Surveys (DHS), various years.

On the one hand, higher socioeconomic status was associated with an increase in the use of modern contraceptive methods as well as with the education level of the mother, partner's approval of contraceptive use, and the number of living children. An increase in the mother's age (to 35+ years compared with those who are aged 24 years and below) and being undecided about how many children they want to have are factors associated with lower chances of using modern contraceptive methods. However, religion and residence (urban- or rural-based women) were found to be weak determinates of modern contraceptive methods in Burkina Faso. In Chad, multivariate analyses of factors associated with the use of modern contraceptive methods among all women in union or those who are in union and live in urban areas show that the odds of using modern contraceptive methods among women in rural areas were 29 percent lower than among women in urban areas. The odds of using modern contraceptive methods was associated with an increase in household socioeconomic status, education level, and partners' approval of contraceptive use. On the other hand, living in the rural areas was associated with a decrease in the chances of using modern contraceptive methods.

Results obtained from Bongaarts model on indices of non-marriage, contraception, and infecundity on the whole show very little restraint on fertility emanating from non-marriage or contraceptive use, confirming prior results that show an early age at marriage and first birth. An index of infecundability seems to be more important in restraining fertility, suggesting that postpartum abstinence and breastfeeding might be more prevalent and hence have a bigger impact on fertility than non-marriage or contraceptive use. There are important differences between countries that must be noted, however. In all cases the TFR observed and that of the model are quite different, suggesting the importance of sterility and abortion in the populations of the eight countries studied.

An analysis of the number of children women have had in their lives shows the expected socioeconomic differentials, which are mostly in line with the experience of women in other countries in Sub-Sahara Africa. Niger and Chad had the highest while Burkina Faso had the lowest mean number of children born to a mother. Results on urban-rural differences show higher mean numbers of children among mothers living in rural areas than among those in urban ones. These differences between urban and rural areas have changed marginally over time in each country. Differences based on socioeconomic status show that the mean number of children born to a mother decreased with an increase in her socioeconomic level. Differences based on the mother's level of education show that as education level increases, the mean number of children born to a mother also decreased.

Multivariate analyses on determinants of fertility—specifically on socioeconomic factors associated with lifetime fertility (number of children ever born) for all women in union, women in union living in urban areas, and women in union living in rural areas—confirmed differences and patterns seen in prior analyses. Observed differences by socioeconomic characteristics of the women are as expected and, by and large, show that the incidences of childbearing are higher with a higher age of the mother and marital duration, the woman's negative views on family planning, and her participation in informal employment. All these factors were positively associated with having more children in a household. On the other hand, an increase in the level of social economic status, age at first marriage, and level of education of both the wife and the partner were strongly associated with a decrease in the number of children ever born to a household.

However, for some countries, such as Burkina Faso, the age at first intercourse, religion, and ethnicity were found to be weak predictors for having many children. Although there are some important nuances by country, in general factors such as women's approval of family planning methods, an increase in the socioeconomic status, an increase in age at first marriage, and an increase in the level of education of both the wife and the partner (secondary and above) were strongly associated with a decrease in the number of children ever born to a household.

PART III - DIGGING A LITTLE DEEPER:

QUALITATIVE ANALYSIS

For a deeper understanding of why the region of West Africa or the Sahel lags far behind other regions of the world on the fertility transition, the qualitative analyses complemented the extensive quantitative analyses and focused on a set of issues related to population choices and how knowledge is transmitted. It is through the triangulation of information from quantitative analysis, focus group discussions, and key informant interviews that a clearer picture of what drives decisions around fertility choices emerges. Some of the highlights of the findings, along with selected direct quotes from respondents, are presented in this part of the report.

THE DEMAND FOR CHILDREN

Since the key first step for achieving a demographic dividend is to speed up and complete a demographic transition (decline in mortality and in fertility), and since the region is struggling with the fertility side of the equation, an important focus of the qualitative work was on understanding the reasons behind the persistent high demand for children in these countries. A demand-side factor for families that are considering the ideal size for their family, and therefore the need to regulate fertility through family planning, is the value a child represents to the family as well as the cost associated with raising a child. A strong finding, which was somewhat surprising in how widespread it appears across groups and countries, is that **children's support for old age security is still given considerable importance, even by urban, educated respondents.**

Across countries, and especially in rural areas, children are considered a source of honor, prestige, and respect as well as a source of practical support in difficult times:

Children bring parent a lot of esteem, prestige and respect.

Female respondent, 33 years old, housewife, no education, rural, Côte d'Ivoire

If you are ill, there needs to be someone to help and look after you, and only a child can do that.

Female respondent, 28 years old, housewife, primary education, rural, Côte d'Ivoire

In largely agrarian societies, children's main value was as workers, although their labor was not necessarily seen as incompatible with formal education:

If you have children they can do domestic work, and you can concentrate on income-generating work. They will do the cooking, the cleaning and let you rest. If they weren't there, you would have to quit your work in order to work in the home.

Female respondent, 28 years old, trader, primary education, urban, Burkina Faso

In urban areas, there appeared to be some shift in perception away from the need for household assistance in that children were seen more as a source of pleasure. However, even in urban areas, children were still perceived as a source of support and as long-term replacement for parental labor—whether this be in fields or in offices. The future economic value of children to parents was underscored by many respondents, even those with higher levels of education.

Interestingly, however, many respondents, even in rural settings, reported a change in the costs of raising children over time. Rising expenditures associated with education, food, and health care result in a perception that the number of children that a family can have should be limited. These

findings have important implications for how best to position, design, and target family planning messages to these populations:

Mentalities have changed because of the high cost of living, before we had many children and now we have few. [Before], with less money (200FCA) I could feed my family and now it's not possible with 400FCA.

Female respondent, 33 years old, housewife, no education, rural, Côte d'Ivoire

The cost of living is high now. . . . Food, schooling, rent, it is all expensive so you need the means . . . to have children.

Female respondent, 33 years old, housewife, no education, rural, Côte d'Ivoire

Furthermore, the difficulties faced by young people in finding employment in the cities, combined with the high costs of urban living, means that children cannot be relied upon to support their parents, as they have difficulties supporting themselves.

Today if you bring a lot of children into the world, and you are unable to educate them all, there will be some who find themselves unemployed. Those who do find work will not be able to also support their brothers. If their brothers ask them for support, they will tell them that they can't even support themselves. Even parents, it's rare that they can support [their parents]. . . because they say that they have too many outgoings. So there has been some change. Before children stayed with their families to support their parents until their death, but these days it is different.

Female respondent, 24 years old, housewife, primary education, urban, Burkina Faso

The phenomenon of child fostering in this region, however, seems to pay an important role in influencing how families perceive the cost of raising children, and it challenges the traditional demographic interpretations of "completed family size." Previous work in this region by Ainsworth (1992) and Castle (1995) in Côte d'Ivoire and Mali found that in these countries in West Africa, direct costs to parents can, in theory, be dispersed or mitigated via child fostering. A previous study in Mali found that around one-third of weaned children under five years of age were cared for by someone other than their biological mothers. Similarly, in Côte d'Ivoire, a study found that one-fifth of children aged 7–14 were living away from both biological parents.

The qualitative inquiry confirmed that child fostering was common for both social and economic reasons. Children could move to a different household to provide help for elderly or childless relatives or to strengthen family ties. Alternatively, a couple might foster out a child if they did not have the means to raise him or her. In such settings, the costs of child bearing can be spread post-natally as children are redistributed in relation to the prevailing sociocultural and economic dynamics of supply and demand that are rooted in social and familial ties and obligations:

I think that fostering out a child can be because you value that person (the foster carer)—it can also be for economic reasons. For example, if the person had more resources than you, you could foster your child out to them in order that they are raised in good conditions. It could [also] be to console a person that has no children themselves.

Female respondent, 45 years old, trader, primary education, urban, Mali

However, it seemed that the increase in living costs recently characterizing many of these country settings had meant that even child fostering was being reappraised and perhaps becoming less frequent:

Before, if you had many children, you could distribute them to [others]. But now that is not the case. Rare are those who accept to raise the child of another. . . . These days, parents cannot even raise their own children. Now if you foster out your child they will suffer . . . [They will be maltreated]. Even if you are poor, you wouldn't foster [your child].

Female respondent, 29 years old, trader, no education, urban, Burkina Faso

The evidence summarized here about the perceived value of children and the cost associated with raising them presents plausible explanations for why demand for children remains much higher in this region than in other parts of the world. Globally, demand for children has been found to be related to perceptions about the survivability of children in high mortality settings. As mortality drops, two mechanisms have been found to explain the decrease in demand for children: the replacement effect and the insurance effect (Angeles 2010). Although mortality, especially infant and child mortality, is on the decline in the Sahel, the evidence here points to a situation where families still see the number of children as insurance for old age support and practices such as child fostering offer an alternative when the cost of raising children becomes unbearable.

On the cost side, here again the evidence shows a slight difference from other regions mainly as a result of the regional phenomenon of child fostering, but the evidence appears to be moving toward convergence. Global evidence shows that as societies move from a dominantly rural population that depends on agricultural production to a more urban population, the perception of children shifts so that, instead of from being seen as adding to household production (Schultz 1997), despite actually being net consumers (Lee 2000; Lee and Kramer 2002), they are seen as being more pure consumers in urban settings where children have fewer opportunities to contribute to the household production or income.

The research appears to confirm that this shift in the perception of the cost of children is beginning to converge toward global evidence, but this perception is not there as yet. This may begin to explain in part the urban-rural differentials in fertility rates. These findings also suggest that future efforts to reduce fertility in the region will need to address these sorts of demand-side issues that are very specific to the Sahel region. Changing these underlying issues and fast-tracking solutions will require concerted and well-designed demand-side interventions.

FINDINGS ON SOCIOCULTURAL FACTORS

Another strong finding on the drivers of the demand for children as well as on the demand for family planning services relates to sociocultural factors. Family planning uptake in the countries where the research took place is notoriously low. In the countries of the Sahel studied, fertility decline is hampered by pro-natalist perspectives, religious opposition, and suspicion about family planning on the part of men.

Unmet need for family planning by women is high in a number of settings and is associated with many women fearing religious, societal, or spousal disapproval and/or the unwanted side effects of hormonal methods:

Muslims say that if you limit the number of children you have, it's a sin and God will punish you. Even at Church, they say that contraception brings illness and that God is against that. They say that God made you to have children and you don't want to (have them). It's hard. It's true that God is watching us. But help yourself and the sky [God] will help you.

Female respondent, 29 years old, trader, no education, urban, Burkina Faso

In these settings, where the median age at marriage for women is around 16 or 17 years of age, women do not generally use family planning to postpone their first birth despite the real

physiological risks they may incur. Newly wed young women are under pressure to show that they are fertile and often welcome a first birth, as do their spouses and in-laws.

Normally it's after giving birth [that they start using a contraceptive method]. After at least one child. . . . It's rare that they come before that. . . . There are some young women that come to us, but it's rare.

Family planning provider, 29 years old, secondary education, Mali

Other women start to use contraception after repeated child bearing when the timing of first use seemed to be driven by financial rather than health considerations:

Some women wait until they have had five children before limiting—it depends on the woman and her financial resources. If you can look after them, you can have as many as you want. You start limiting according to your financial abilities. Some women have four children before they start limiting.

Female respondent, 20 years old, trader, primary education, urban, Burkina Faso

In many of the countries studied, prevailing religious doctrines may perceive the notion of using family planning for limiting the number of children as being unacceptable. To improve acceptability, national family planning programs therefore choose to promote family planning for spacing and underscore the overall health benefits for the mother and child and the fact that parents can better look after fewer children:

For me it's for the health of mother and baby that we space our births.

Female respondent, 34 years old, housewife, primary education, rural, Côte d'Ivoire

Islam recommends being able to have the economic means to marry and above all not to bring children into the world if you cannot ensure their future. If you do that, you are in contradiction of Islam but ordinary people don't know the (religious) texts and pretend they are Muslim.

Islamic religious leader/General Secretary of an Islamic Association, high school education, Niger

Respondents stressed the importance of providing family planning information through mass media campaigns targeting men and extended family members as well as women, and emphasized the economic as well as the health benefits of family planning.

I definitely think that mass media communications are important. Television and radio spots. . . . In my opinion that is best, because we can reach many people at the same time. . . . For us, normally, it's just the women that we manage to speak with. But they don't generally get the last word. We also need . . . fathers-in-law, mothers-in-law, the husband. We need the cooperation of many people. . . . Men are afraid, they fear the side effects [of contraception]. They say that the woman won't be able to have children after. . . . I think that if we can provide them with the right information, then it will be better. . . . Make them understand that the side effects are limited, the advantages, the disadvantages, explain to them so that they understand. That could work.

Family planning provider, 33 years, secondary education, urban, Burkina Faso

The qualitative inquiry presented a consistent challenge on how society and the religious cultural factors influence household decisions around engagement with family planning services and

providers. It also provides important hints on how to go about messaging for family planning services and how to target not only women, but men and religious leaders as well. Given the strong pro-natal perspective, the strong interpretation of religious opposition, and men's suspicion of family planning services, the following steps may be important in both delivery and messaging around family planning programs:

- 1. Family planning messages are best orientated around the benefits of spacing children for the health of the mother and child. Emphasis can also be put upon the financial savings for men that are generated by raising fewer children.
- 2. Family planning service delivery benefits from bundling of services—for example, with immunization services or nutrition interventions. This can enable women to better access family planning without explicit spousal or societal disapproval.

FAMILY PLANNING SERVICE PROVISION AND TRAINING OF WORKERS

Another area of focus for the qualitative inquiry of this study was to understand how family planning programs and services can be improved in order to increase uptake. As noted in the previous section, bundling family planning services with immunization, nutrition services, or postnatal care can serve to increase use, especially in contexts where male disapproval is high and where women may need to acquire family planning covertly. To increase access to family planning services, respondents considered it important to provide more family planning clinics in a diverse range of settings and locations, including harnessing the private sector and serving hard-to-reach groups via mobile clinics and outreach:

Family planning services should be available in all public and private health centers and these services should be accessible to the whole population. . . . We need to emphasize family planning for good reproductive health and also for development. . . . The integration of family planning into other health services such as baby weighing and vaccination makes it easier and more effective. Access to fixed complemented through mobile clinics in communities.

Nongovernmental organization (NGO) Executive director, 52 years old, university education, urban, Côte d'Ivoire

After the birth, they come for baby weighing and for health care services for children under five. It's there that we talk with them. We explain to them what they can do [with regard to contraception]. . . . Also, if we use outreach workers, the women will come and ask for family planning even more. So if we want to reach a greater number of people and give accurate information then we need to coordinate with the outreach workers.

Family planning provider, 29 years old, secondary education, rural, Mali

Investment in the training of family planning providers was also considered necessary to improve services. Some providers testified that the training that they and their colleagues received was insufficient to provide full enough explanations to clients with regard to the advantages and disadvantages of each method. In particular, they find it hard to manage the side effects users often experience, which may lead to women discontinuing contraceptive use or changing the method they use. The providers described how it was difficult to keep up to date with new developments without continued in-service training:

[A] main problem with long-term methods is the management of their disadvantages. I have difficulties! . . . During our training we are given information [on long-term methods]. [But] often we are limited—there are women that come, you don't know what to do, you have exhausted your knowledge. Often we refer these cases to a gynecologist.

Family planning provider, 33 years old, secondary education, urban, Burkina Faso

The providers also described how their pre-service training left them ill-equipped to advise women about family planning, especially with regard to the use of long-term methods, which are key to promoting contraception use among individual women and to sustain fertility decline at the population level:

During our training, because there were many of us, to be able to practice in the field is difficult. . . . The practical experience provided during the training is not sufficient. . . . I'm shocked to see [that] there are students in their third year [of three] who don't know how to insert the implant, who don't know how to remove it, when they're at the end [of their training]. There are many who finish without knowing that. It's in the field that they learn.

Family planning provider, 29 years old, secondary education, rural, Mali

Nevertheless, such training needs have to be viewed in the context of health sectors that are often severely underresourced:

We see that for this year we have one doctor for 17,000 Nigeriens even though the WHO norms are one doctor for 10,000 Nigeriens and we even recruited in 2011. Before that we had one doctor for 34,000 Nigeriens. If we turn to nurses, we have one nurse for 4500 people and this is not within WHO norms – you will find also that they are all in urban areas. If you go into the rural areas, there might just be one doctor and one nurse.

M&E Specialist, Ministry for the Promotion of Women and Child Protection, Niger

The qualitative inquiry found challenges on the supply side of family planning programs in the region that further complicate the demand side picture. A shortage of human resources for health compromises both service access and quality. Family planning providers lack adequate preservice or in-service training and skills, which results in their not having necessary knowledge about long-acting methods or about the management of side effects.

POPULATION GROWTH, MIGRATION, AND URBAN LIVING

Rural-urban migration has played an important role in speeding up the demographic transition in most countries around the world, including in the Sahel. The qualitative analyses focused on how the migration process is perceived as well as on the positive and negative impacts of the population growth in urban settings.

Interviewees acknowledged that, in some cases, the increasing population in towns and cities had led to more development in these urban areas, with improved potential for productivity and entrepreneurship. Many stakeholders also noted that the large working-age population coming to the cities was an opportunity to increase production and therefore to contribute to the growth of the economy:

It's true that there is a concentration of young people in Ouagadougou but they are good for manual labor. People just have to get by one way or another . . . you notice that it has had an effect on small businesses. . . . [T]here are a lot starting up now. It increases the number of services available in our towns.

Credit and savings organization representative, urban, Burkina Faso

There are many small businesses that are opening. . . . That improves the level of services offered in our towns and cities.

Bank Director, 47 years old, university education, Burkina Faso

The growth of the youth population is not a bad thing in and of itself . . . if the population has good potential and if the surplus they produce is used in an

appropriate manner then this resolves the [problems associated with the] fact that the population overall is growing.

Director of Policy, Ministry of Youth, Government of Burkina Faso

Nevertheless, many respondents focused on challenges. The high prices of electricity and water and frequent outages were problematic for urban residents, both personally and for the growth and expansion of businesses:

The frequent cuts in water and electricity influence our professional activities in both the public and private sectors private sectors. [Because of the cuts] there has been a drop in takings among small businesses.

Male respondent, 23 years old, businessman, university education, urban, Côte d'Ivoire

Widespread rural-urban migration without a strengthened urban infrastructure often resulted in significant social, economic, and health consequences. As cities have expanded rapidly, urban infrastructure has not been able to keep pace. Many urban residents expressed concerns about hygiene because of poor sanitary conditions and noted the creation and expansion of slum areas with poor-quality housing.

Urban residents and policy makers alike expressed that there were significant pressures on services as a result of rapid population growth. Health services were noted to be too few and not sufficiently accessible. With regard to schooling, the demand among ever-increasing numbers of urban families has meant that class sizes have increased and that education quality is compromised.

Other findings included challenges caused by population pressure on tertiary education, housing (including rising rents), poor-quality and/or inaccessible education, widespread unemployment, poor living conditions, and an increase in insecurity and petty crime.

EDUCATION AND TRAINING

A critical element of a country's investments for capturing a demographic dividend is its ability to deliver high-quality education. The qualitative work sought to get a better understanding of how the populations see quality of education and other dimensions of the education system. Problems with education access, especially in rural areas, begin in primary school, so the basis for increasing people's educational opportunities is compromised when they are very young. In addition to problems with access, the quality of school infrastructure was also often inadequate:

Education structures are insufficient in quality and quantity. . . . I'm referring mainly to the villages. When I see that there are students who travel more than 10 kilometers to go to school, I think that provision is not sufficient. The problem is there at the primary level, at a secondary level too. There are not many colleges, not many high schools in the villages. So few that students are obliged to travel 10–15 kilometers, even 20 kilometers to go to school.

Bank director, urban, Burkina Faso

You need to go beyond political discourse and mobilize enormous sums of money. It is inadmissible that today in Niger we have classes that take place in straw huts and shady areas (in the open air). At one point, I thought that the new authorities were going to put in place a new five year program to modernize but even now we see that classes in straw huts still exist. In other countries, you don't see that.

Education specialist, urban, University of Niamey, Niger

Stakeholders reported that the state education system was inadequate and cited a lack of teachers, schools, and classrooms, which has led to a decline in the quality of education provided:

Now, we have classes at a school very near here where in one single class at 6eme—there are 115 or 120 pupils for a single teacher. In these cases we "double up"— that is to say that half the class comes in the morning . . . and the other the evening . . . or we see "double division," which is where [two year groups] are in the same class with the same one teacher. . . . No matter how talented a teacher . . . it is extremely difficult, impossible even, to focus your attention on all these children.

University professor and secondary school teacher trainer, urban, Mali

There is a general lack of classes, of educators, or materials and equipment. This translates into oversized classes and subsequently a poor attainment of students and poor exam results.

Executive director of an NGO, urban, Côte d'Ivoire

Drop-out rates were high. Girls, in particular, drop out because of their households' demand for their labor or because they get pregnant:

There is high dropout, of those who enroll in year 6, very few reach year 3 and of those who enter year 2 very few go into the last year of secondary school because of the poor living conditions. . . . Some people don't want to send their girls to school because they want them to do housework. [F]or example in Maradi, the girls start to sell kola nuts at the weekends and gradually there is a dropout as they consecrate more and more time to their trading. Early pregnancy is a problem as once a girl gets pregnant, it [her education] is finished.

Educational specialist, University of Niamey, Niger

Other challenges identified include low teacher morale leading to frequent drop-out from the profession, the lack of financial motivation extended to teacher trainers who also feel underresourced, and, as a consequence, undermotivated.

Students face many barriers to gaining a secondary education. These include high school fees, long distances to travel to school, and the high cost of transport. The expense of fees as well as other costs such as uniforms and materials means that many students do not go to school or drop out because of a lack of financial resources:

The barriers to young people going to university and further study are, [for many institutions], the high course fees . . . that are exorbitant in relation to the bursaries that students receive. . . .[Another problem is that] due to the low capacity of universities in recent years many of them have limited their intake of students.

Educational specialist, urban, University of Niamey, Niger

The lack of suitable, high-quality, affordable housing is a further barrier to both secondary and university education. Because of these barriers, as well as frequent strikes and school closures, student motivation to attend secondary school and university is often low.

A particular issue is the education of girls. Barriers to girls' education, especially from secondary level onward, include the persistence in some areas of traditional values that deem that girls require a limited education so as not to get in the way of early marriage and childbearing. In addition, some young women's motivation for and ability to go on to secondary school and university is low. Many perceive that their opportunities in the job market are limited when faced with competition from male graduates:

Another social factor [that is a barrier to girls' education] is that many of our students' parents are illiterate and think that, don't encourage their daughters to study, who say that it's important for girls to have a certain level of education, when a girl knows how to read and write . . . that's the essential [part]. . . [after that] she should marry and set up a household. That mentality is still there. . . . [I]t's a real factor that discourages our young women from studying. . . . Many of our girls say that after their studies, with the competition on the job market, that they won't be able to compete with the young men . . . that faced with a young man with the same qualification he will find employment much more quickly than them

University professor and secondary school teacher trainer, urban, Mali

Because of a lack of funding, some young women who move to towns to pursue secondary schooling or university are financially supported through relationships with older men. This "sugar daddy" phenomenon, combined with the perceived discrimination in the job market described above, has implications for equity both in tem of women's access to opportunities and their safety:

Some copy their friends who haven't done many years of study and who are supported by men who offer them a house, a car and pocket money.

Female secondary school teacher, 44 years old, urban, Côte d'Ivoire

Given the importance of education, especially for girls, and its spillover impact on the demand for children, a focus on improving the education systems in order to improve both the quantity and quality of education is a critical developmental issue. This is especially challenging given the importance of not only building human capital in the Sahel, but also because it is essential to ensure that education is addressing the needs of the most vulnerable and not adding to inequality in the countries.

YOUTH EMPLOYMENT AND THE BUSINESS ENVIRONMENT

Given the challenges in the education system described above, unemployment among young people is high. There are not enough jobs to absorb the growing working-age population who are largely unskilled. There also appears to be a mismatch between available skill sets and the demand for labor. In such settings, the private sector can play a more central role in catalyzing business initiatives and growth. In addition to the lack of suitable training, young people were not able to access guidance in to how to start successful businesses:

At the moment, the training that we offer to young people is not aligned with our needs as a society. Concerning young, educated people . . . the state alone cannot accommodate everybody's needs. I think more and more that we need more private initiatives. There are also few opportunities for progression as young people have limited training and those who manage to start a business face difficulties when growing it. In addition, the market is saturated with the same types of businesses, there is a lack of innovation and this means that entrepreneurship is limited.

Bank Director, urban, Burkina Faso

Corruption is also a significant barrier in the employment sector and is not being tackled. Many young, educated urban respondents reported that they or their peers had experienced the effects of corruption in the job market. This, along with a poor business environment, makes entrepreneurship difficult and deters foreign investment:

Instead of employing the person who has the right diploma, the employer prefers to give the job to a cousin who lives with them. There has been a politicization of access to employment. Young people with diplomas are sidelined. These days

you don't need a diploma, you need to have "long arms"—that is to say social relations [to get a job]!

Female respondent, 34 years old, primary education, trader, urban, Burkina Faso

Corruption and the diversion of funds prevent job creation and young people's access to employment. The mayor of our commune diverted funds for young people in order to build shops, not create jobs.

Male respondent, 28 years old, decorator, university education, urban, Côte d'Ivoire

Job creation is vital to absorb the growing young population into the economy and harness their capacity for production. Respondents felt that education and training programs must be made more vocational so education will be better oriented toward available employment opportunities.

For those who remain in the agricultural sectors, it was suggested that reforms should link training and entrepreneurial opportunities directly to raw materials processing with an emphasis on access to information technologies:

Côte d'Ivoire, an agricultural country, imports rice and cannot satisfy the needs of its population. We need to modernize agriculture in order to be self-sufficient in rice production and export the surplus. Other raw materials [coffee, cocoa] can also be processed by developing the secondary and tertiary sectors to create employment for young people.

Executive director of an NGO, urban, Côte d'Ivoire

BANKING AND SAVINGS

A final area of focus is related to issues around saving schemes and personal financing, both of which are critical for the potential of a demographic dividend. In general, it was found that people save very little because, first, they have very little disposable income and, second, because the demands of their immediate and extended families are high (often this is a consequence of a large number of dependents and unemployed relatives). This is exacerbated by the high and rising cost of living, particularly in urban areas, and by a perceived lack of savings and credit opportunities:

The most common barriers to saving are level of income, level of outgoings . . . , lack of motivation. An economically active person might support 10 dependents (family, in laws, cousins). In Africa we don't have insurance, or savings—the community is our insurance.

Executive director of an NGO, urban, Côte d'Ivoire

However, a representative of a financial institution in Burkina Faso believed a main problem to be a lack of understanding about banking systems and financial management. This is a problem not just for household and individual savers but also for the growth of small businesses, as financial illiteracy limits their ability to expand. In addition, although salaried employees usually had their salaries paid into a bank account on a monthly basis, they did not use the bank's savings, lending, or credit facilities but simply withdrew their income:

It's because people are not well educated in saving. Saving is easy. Even with 500FCA you can save 25FCA if you make sacrifices. . . . It's not poverty that prevents people from saving. Even in poverty you can save. . . . Very few people use banks. And even those who have bank accounts, when you look at the number of accounts that are actually active, where there is actually money in them, it's very small. For example a civil servant, once his money is in there [his salary has been paid into his account], he will take out all of his salary in one transaction.

Director of a bank, male, 47 years, university education, Burkina Faso

For those who did not have a regular income, gaining credit from a bank is seen as impossible:

Access to credit from the bank depends on one's solvency and proof of income. . . People can't get credit because they can't provide proof of income. The interest rates are also high.

Executive director of an NGO, urban, Côte d'Ivoire

In some cases, the cost of opening and maintaining an account was perceived to be prohibitive:

Banks only lend to business men with regular salaries.

Male respondent, 25 years old, trader, secondary education, urban, Côte d'Ivoire

Because of these access issues, women in particular often opted for a *tontine* that they organized themselves. This involves a small group of individuals contributing a set weekly or monthly sum to a "pot." This pot rotates so that at the end of each week or month, one person gets the whole amount to spend or invest as they wish. This is an extremely common savings mechanism in Africa across all socioeconomic groups. It exists among the poorest (who may save just CFA200 a week) to (more rarely) wealthier individuals who may regularly contribute several hundred dollars to such a savings club:

We take part in tontines. Every two weeks we put aside 2,000FCA per person. I know many people [who have benefitted from tontines]. . . . Some opened up shops, some now sell skirts, one bought a motorbike.

Female respondent, 28 years old, trader, primary education, urban, Burkina Faso

For me [the tontine] is a way of saving and it helps me with my trading.

Female respondent, 21 years, housewife, no education, rural, Côte d'Ivoire

It's a way of saving and it enables me to buy the palm kernels [that I sell].

Female respondent, 29 years old, housewife, no education, rural, Côte d'Ivoire

KEY MESSAGES FROM THE QUALITATIVE INQUIRY

The wealth of information provided by the qualitative work covered most dimensions of the demographic divided. The most immediate need relates to ways to speed up the demographic transition, specifically the fertility decline. But the work also covered important medium- and long-term issues related to building human capital for the coming youth bulge, youth labor markets, business environment, the financial sector, and savings. The value of this work is that, combined with the quantitative analysis, it gives a clearer picture of *why* the demographic picture in this region lags other parts of the world, strengthens the prioritization process for *what* needs to be done, and—perhaps most important—gives valuable insight on *how* to go about influencing behavior.

The following are key take-home messages from the qualitative analyses:

- 1. Communication messages about family planning are more effective if they are focused on the benefits of child spacing for improving the health of women and children rather than on limiting family size.
- 2. Men and religious leaders and organizations are critical targets for communication about family planning.

- 3. Messages about the cost of raising children and savings and investments from fewer children are beginning to take hold, but they still face difficult cultural challenges such as child fostering. Fast-tracking this transition will require creative demand-side approaches that aim to change social and behavioral norms.
- 4. Family planning services are best delivered as part of a bundled health services package instead of alone, in a vertical approach. In addition to improving access to family planning services, this approach also reduces the opportunity costs for women as well as service delivery costs of integrated delivery.
- 5. The supply of family planning services in the region suffers from staffing and skill challenges and has failed to provide adequate information to providers and subsequently to women and families.
- Innovative mechanisms for service delivery, such as public-private partnerships and mHealth through technologies such as mobile phones, approaches should be considered.
- 7. Education, especially for girls, will have important positive externalities on the demand for children, making efforts to strengthen both the quantity and quality of education a critical issue in the Sahel region.
- 8. Interventions to promote financial literacy and entrepreneurship, especially for women, will enable populations in this subregion to access new opportunities, including those for savings and credit in the formal sector.

PART IV - POLICY SPACE ANALYSIS

The third element of the analytical approach to population challenges and opportunities in the Sahel focused on the policy space in four of the eight countries: Burkina Faso, Côte d'Ivoire, Mali, and Niger. The basic idea was to identify where these countries are at this moment on the main policies that can help speed up the demographic transition in order to better understand where actions are still needed. This required a two-step approach. First, a global review of the literature was conducted to define what a robust policy map would look like. This focused on policies that have proven to work, based on rigorous evaluations. The second step required field work in the four sample countries to assess where in the proven policy map these country resided. Clearly, a policy has to be more than a document to be of value. This meant that the second stage needed to go beyond documentary reviews to understand (1) what policies cover, (2) how policies are being translated to action, and (3) where countries are in the actual implementation of these policies. The combination of the two steps (developing a policy map based on global best practice and assessing how countries are performing relative to global best practice) allows the identification of the "policy space" available. When that is combined with the quantitative and qualitative work (Parts II and III respectively), countries can better assess what still needs to be done and how these elements can be prioritized (Part V of this report lays out that process and the main findings).

POLICY MAPPING: A GLOBAL REVIEW OF EVIDENCE

The theoretical and empirical literatures have identified a number of factors that may influence the demographic transition, especially fertility, both directly (so-called *proximate determinants*) and via more upstream mechanisms (*distal determinants*). In the former category, the strongest proximate determinants of fertility are the onset and likelihood of marriage/sexual activity, contraceptive use, and postpartum infecundability (the result primarily of breastfeeding and postpartum abstinence) (Bongaarts 1978). Distal determinants are socioeconomic factors that affect fertility via these proximate determinants. Distal factors include child mortality, education, household wealth, urbanization, and religion. This section briefly presents program and policy approaches that have been implemented in different contexts, as well as their results, including relevant fertility impacts. First, the section discusses initiatives aimed directly at two of the strongest *proximate* determinants of fertility: family planning and age at marriage. Next, it considers programs that address key *distal* determinant of fertility—child health and women's education. Finally, it presents a set of programmatic lessons and investment recommendations based on the global evidence.

Family Planning

A number of policies and programs have targeted awareness and use of family planning. Approaches discussed here include increasing the local availability of contraceptives, whether community-based or at low levels of the health system; implementing mechanisms to reduce the cost of contraception, such as vouchers or subsidies; and adopting communications strategies, including large-scale media campaigns, community and religious group initiatives, and intrahousehold dialogue promotion.

One of the most successful ways to increase uptake of family planning is through **local distribution of contraceptive supplies**, whether at the household level (door-to-door provision) or via mobile health centers. For example, the Matlab region of *Bangladesh* has seen perhaps the most concentrated, long-term family planning program in the world. Contraceptive use increased drastically and there was greater demand for spacing methods when women had improved educational attainment and increased earnings, and women had on average 1.5 fewer births over the 20-year period compared to counterparts in the control area (Koenig et al. 1987; Gribble and Voss 2009). In *Ghana*, the Danfa Family Planning Programme increased local availability of family planning methods during the 1970s by sending mobile units of staff plus supplies to rural clinics

on a biweekly basis. These efforts significantly increased uptake of contraception, but the literature does not indicate any fertility/childbearing effects (Ampofo et al.1976). And in the 1990s, the Navrongo Community Health and Family Planning Project's areas that received the supply plus demand interventions saw the biggest increases in contraceptive use, as well as the largest overall fertility effects (Debpuur et al. 2002). A program in *The Gambia* likewise implemented different supply- and demand-side interventions (such as peer-educator intervention) to increase use of contraception. Some communities received more than one of these interventions, others received just one. The communities that received the peer-educator intervention saw the biggest increases in contraceptive use, even in the absence of the supply strengthening intervention—suggesting that demand-side factors may have played a bigger role in contraception uptake than supply constraint (Luck et al. 2000). *Mali* introduced a local contraception distribution program in the 1980s and 1990s that increased contraceptive use from 1 percent at baseline to 31 percent during and after the intervention (Katz et al.1998).

Another approach to increase utilization of family planning is to change how health facilities and/or health workers provide these services; sometimes, projects that work on this mechanism have been combined with demand-generation activities as well. The Zuma Family Planning Program in Nigeria focused on providing family planning information and services at lowlevel health facilities. Program results indicated increased knowledge of contraceptive methods and a greater stated desire to limit family size (Faroog and Adeokun 1976). A program in *Uganda* during the 1990s improved training of nurses and midwives to promote and provide contraception, increasing use of family planning only in urban areas (Ketende, Gupta, and Bessinger 2003). When Mexico added family planning education to its national clinical guidelines for prenatal care, the likelihood of postpartum use of contraception significantly increased (Barber 2007). An experiment in Nepal measured whether targeting postpartum women with information about family planning would change use patterns. Results indicated that, while uptake of family planning did not see any change in the short-term, uptake increased in the longer-term (about 6 months) (Bolam et al. 1998). A program in Mali added family planning counseling and services to immunization days, greatly increasing uptake of modern methods of contraception (Population Services International 2012). And another project in Mexico assessed the impact of tools to help providers counsel patients about family planning and provider training, which improved quality of service provision and decision-making style (toward joint decision making) but had no effect on clients' method mix (Kim et al. 2005).

Policies and programs to reduce the financial burden of accessing family planning particularly among low-income women and adolescents—have also seen positive results in uptake of contraception and reduced fertility. In the *United States* since the early 1990s, policies varied by state for accessing subsidized family planning programs. Results indicate that women in states offering expanded services were less likely to become pregnant, mostly because of the increased use of contraception (Kearney and Levine 2009). A *Nicaraguan* program that distributed vouchers to adolescents (outside schools, on the street, door-to-door, etc.) for free family planning services at local health facilities saw significant success in increasing use of reproductive health services, greater knowledge of contraceptive methods, and some increased use of family planning methods (especially condoms) (Meuwissen, Gorter, and Knottnerus 2006). The Berhane Hewan program to reduce child marriage in Ethiopia targeted girls aged 10-19 in a rural village within the Amhara region of north-central Ethiopia. Evaluation results show that girls who participated in the program had better family planning knowledge and higher rates of contraceptive use than their counterparts who were not in the program (Erulkar and Muthengi 2009). Another program in the Amhara region, Tesfa, targeted married adolescent girls, aiming to improve their social, economic, and health outcomes. An evaluation of Tesfa found an increase in knowledge about and the use of contraceptive methods, as well as increased knowledge about sexually transmitted infections and increased testing for HIV. This evaluation also found changes on economic indicators, such as increased participation in income-generating activities and increased savings (Edmeades, Hayes, and Gaynair 2014).

Social and behavior change communication (SBCC) methods can also be used to increase use of family planning and decrease fertility—for example, via large media and social marketing

campaigns. Ethiopia launched a radio serial drama about preventing HIV/AIDS, including the use of barrier methods of contraception. An evaluation of the campaign found that people who had listened to the program reported higher family planning self-efficacy (Farr et al. 2005). A radio program in The Gambia that focused specifically on family planning messages had similar effects (Valente et al. 1994). During the 1990s. *Tanzania* aired a radio soap opera about family planning and HIV/AIDS with storylines developed following formative research with religious and youth groups; the result was increased self-efficacy around family planning, positive attitudes about and approval of family planning, and increased use of contraception among married women (Rogers et al. 1999). Similarly, an intervention in Mali recorded songs about family planning, including the importance of birth spacing and smaller family sizes, and corrected misconceptions about specific methods as well as Islamic attitudes about family planning. Changes in attitudes about Islam's acceptance of family planning, increased knowledge about family planning, and more favorable overall attitudes about family planning resulted (Kane et al. 1998). Côte d'Ivoire undertook a large social marketing campaign for family planning in the late 1990s (marketed via the private sector). The campaign was combined with advertising campaigns, radio programs, and short films aimed at changing behavior and attitude. This SBCC approach was accompanied by increased integration of family planning services into the public sector and improved procurement of supplies and equipment for family planning at health centers. The program was found to increase use of contraception, particularly condoms, and to increase use of reproductive health services at public facilities (versus traditional care, for example for sexually transmitted infections) (KFW-Entwicklungsbank 2006).

Another SBCC approach involves community-based interventions to change knowledge, attitudes and behaviors about family planning. The Tostan program in Senegal conducts community discussions about a range of health issues relevant to child marriage and girls' reproductive health, such as sexually transmitted infections /AIDS, female genital cutting, birth spacing, and using contraception. Evaluation results indicate that the program increased awareness about family planning and reproductive health in targeted communities (Diop et al. 2004). A recent program in *Mali* worked with Imams to develop community education messages about Quran passages that promote good health and the related importance of women's rights, taking care of children, and engaging men in family health decision making (Health Policy Project 2011). No program results are published to date. The Kundam project in *India* during the 1980s leveraged community groups to promote discussion of family planning, resulting in increased use of contraception (Nag 1992). During the 1990s in Bangladesh, a project explored whether social networks could be leveraged to increase use of family planning. The intervention identified "link persons" within social networks to facilitate regular peer group discussions about contraception and to provide supplies as needed. These efforts resulted in greater use of modern methods among women in these networks (Kincaid 2000).

Intra-household communication about family planning has also been targeted by several programs, often via experimental designs involving husbands in decision-making about contraception. A project in Ethiopia showed that when husbands were present, women were more likely to initiate and continue using a modern method, usually the pill; as a result, rates of contraceptive continuation for the joint-intervention households were nearly doubled (Terefe and Larson 1993). A similar field experiment conducted in Zambia, however, found that a woman who received the information alone was more likely to attend a follow-up visit to receive contraception, and was more likely to opt for a concealable method; this was estimated to have a large effect on decreasing unwanted births in this group, whereas women whose husbands were present for the informational visit did not have a decline in unwanted births, despite their increased uptake of family planning (Field, Ashraf, and Lee 2010). A project in Vietnam specifically targeted husbands' attitudes about use of family planning through a targeted letter with customized messages about the importance of family planning and benefits of intrauterine devices (IUDs). Results indicated a change in men's readiness to adopt family planning, an increase in their concordance with wives' readiness, and an increase in men's perceived benefits and self-efficacy around IUD use (Ha, Jayasuriya, and Owen 2005).

Finally, some countries have launched comprehensive national family planning programs that employed a combination of the above strategies to reduce fertility rates. Bangladesh and Pakistan had similar fertility rates in the 1960s and early 1970s. However, building off the success of the Matlab experiment as discussed above, Bangladesh launched a family planning program with door-to-door provision of contraceptives by health workers. This was accompanied by a large communications campaign, including one hour each day on Radio Bangladesh dedicated to family planning and population health topics. Before this national initiative began in the early 1980s. Bangladesh and Pakistan had the same fertility rate—now Bangladeshi women bear on average 1.8 fewer children than their Pakistani counterparts (Bongaarts et al. 2012). Kenya and Uganda had the same fertility rate in the late 1970s; Kenya then launched a national program of community-based distribution of low-cost contraceptives combined with a communications campaign about limiting family size and use of family planning. Now Kenyan families are smaller by approximately two children than Ugandan families. Notably, this program was scaled back after the mid-1990s, which explain in part the stall in declining fertility rates for Kenya since that time (Bongaarts et al. 2012). Iran and Jordan also had similar fertility rates in the 1980s—but then Iran introduced a national program to provide free contraception via village health workers combined with a media campaign about the importance of small family size, and Iran's fertility rate is now 1.8 births per woman lower than the rate in Jordan (Bongaarts et al. 2012; Aghajanian and Merhyar 1999). *Indonesia* also made a large attempt to decrease fertility beginning in the 1970s. First, the government built clinics and recruited a large cadre of health workers. It then established "village contraceptive distribution centers," with health workers available to provide counseling and education to patients. The private sector also received incentives from the government to distribute contraceptives. The government launched education and sensitization campaigns to promote use of family planning; it also engaged community leaders, and national leadership showed political commitment to the issue. Over the first decade of the program, contraceptive use increased from 3 percent to 63 percent, and the fertility rate fell by approximately one child per woman (Warwick, 1986; Pitt, Rosenzweig, and Gibbons 1993; Molyneaux and Gertler 2000).

The empirical literature shows that there are many different approaches to influencing family planning attitudes and behaviors. At the community level, the most effective initiatives have combined supply- and demand-side initiatives—interventions to address only one or the other have seen smaller impacts. Effective approaches via the health system have targeted key populations, such as postpartum women and women attending immunization clinics for their infants; similarly, initiatives to reduce the financial burden of contraception among vulnerable groups (e.g., adolescents, low-income women) have seen success. SBCC, whether through large media efforts such as radio serial dramas or local initiatives such as community dialogues, have also been shown to change attitudes, knowledge, and/or use patterns; evidence on interventions aimed at intra-household communication has been mixed. Finally, sizeable impacts have been seen when countries implement large programs that incorporate health systems interventions at the local level alongside SBCC methods. Such comprehensive approaches require significant budgetary resources and political commitment, but they have shown significant effects on contraceptive use as well as on overall fertility rates.

Age at Marriage

Early childbearing is linked to overall fertility as well as to maternal and infant mortality, so projects aiming to **postpone early marriage and early pregnancy** are relevant for fertility rates as well as for health improvements and the demographic transition more generally. The Berhane Hewan program in *Ethiopia* incorporated both family planning and education aspects alongside a community-based program that provided mentoring for girls, signed compacts with families to delay their daughters' marriages, and conducted community discussions about child marriages. This program resulted in later overall age at marriage in the targeted communities. Building off experiences from the Berhane Hewan, a recent project in *Burkina Faso* addressed knowledge, attitudes, and practices related to early marriage. In intervention communities, mères-éducatrices (mother educators) worked with adolescent girls to develop income-generating activities and provided thrice-monthly education sessions on topics related to early marriage, including referrals to the health system for girls with reproductive health needs. As a result, knowledge about the legal minimum age at marriage increased, and girls had greater knowledge about contraception

and they increased their use of sexual and reproductive health services, particularly at the time of childbirth (Engebretsen and Kabore 2011). The Safe Age of Marriage program in *Yemen* focused on delaying marriage among children and adolescents. It trained community educators—both male and female, and including religious leaders and health workers—to conduct community-based outreach with families about child marriage. Evaluation of the results indicates that the program successfully decreased young marriage in the targeted community (Freij 2010).

Programs to delay marriage tackle complex normative and economic issues, usually by implementing multisectoral initiatives that include families and community members, touching upon education as well as reproductive health. However, there is little evidence-based information about the impact of laws that seek to delay age at marriage, such as those passed in Bangladesh, China, India, and elsewhere that increase the minimum allowable age for marriage. One evaluation of a legal reform around age at marriage—one passed in Indonesia in 1975—found that the law did not significantly decrease child marriage (Cammack, Young, and Heaton 1996). A recent comparative analysis of approaches to increase the age at marriage found that in fact the weakest body of evidence exists around such legal and policy changes (Malhotra et al. 2011). This may be because implementation has proven difficult. An assessment of such a recent law's implementation in India, for example, indicated that enforcement and accountability mechanisms were not effective, and awareness (among all government levels, as well as within communities) remained low for several years after the law's passage (Das Gupta et al. 2008).

Infant and Child Health

Infant and child health is essential to the demographic transition, both for ensuring child survival and for decreasing fertility. The literature on the relationship between child health and fertility has focused on two main pathways: replacement and hoarding/insurance (Taylor et al. 1976; Preston 1978; Montgomery and Cohen 1998; Hill et al. 2001; LeGrand and Sandberg 2006; Hossain et al. 2007). *Replacement* is the idea that the death of a child results in a subsequent change in reproductive behavior to "replace" the lost child. The *hoarding* (or insurance) effect of child mortality is based on the notion that parents have an ideal "final" number of children and anticipate mortality risks based on prior child death experience of their own or of others and form their reproductive plans accordingly.

The Matlab program in Bangladesh discussed earlier also included an infant and child health component: over the study period, the intervention also delivered vaccines, vitamin A, nutritional support, and treatment for respiratory infections and diarrhea. In the earlier-discussed project targeting postpartum women in Nepal, the intervention group also received education about infant feeding, diarrhea, respiratory infections, and immunizations—and ultimately saw significantly higher breastfeeding rates and higher immunization coverage than in the control group (Bolam et al. 1998). A social safety net program launched recently in Niger includes a component about child nutrition and development-including promotion of behaviors such as breastfeeding, use of insecticide-treated bed nets, varied diets, and so on. Program results have not yet been published (World Bank 2013). Many conditional cash transfer (CCT) projects (discussed in more detail within the "Education" section, below) incorporated conditionalities related to child health activities, and CCT results are strongest around these outcomes. Progresa/Oportunidades in Mexico offered payments conditional on obtaining preventative medical care and fortified food supplements for women and children; the program saw increased rates of growth monitoring and of immunization, and decreased rates of child illness and of child stunting. The Familias en Acción program in Colombia included nutritional subsidies for children in urban areas; the program did not find a decline in childhood malnutrition, but it did identify reduced acute diarrhea rates among urban children, as well as increased growth monitoring. The Nicaragua Red de Protección Social program provided food security transfers to rural households, conditional on attending monthly health education workshops and/or bringing young children for checkups and preventive health care. The program resulted in increased growth monitoring and increased timely immunization of children (Rawlings and Rubio 2005). Additionally, a CCT in Burkina Faso for routine child health care increased clinic use versus an unconditional cash transfer, but no health outcomes have yet been reported (Akresh, De Walque, and Kazianga, 2013a).

Education

The relationship between education and the determinants of fertility has been seen across countries and across time. Female education affects fertility in a number of ways: (1) women who are more highly educated are likely to marry later and begin childbearing at older ages; (2) there is a greater opportunity cost in child rearing for women with more education (schooling is taken as a proxy for women's potential wage), (3) the risk of child mortality is lower for women who are more highly educated, and (4) women with more education have a better ability to decipher and use contraceptive methods. A number of different approaches to increase educational attendance and attainment at both the primary and secondary level, as well as skills-building for literacy and numeracy, have been implemented globally. Impact on educational outcomes, age at marriage and/or sexual debut, and childbearing attitudes (ideal family size) and behaviors (number of children borne) have been measured.

Policy changes around primary schooling requirements appear to have a strong effect on fertility. When Kenya increased required primary schooling from seven to eight years, overall education attainment increased and girls in particular saw a big boost. In addition to this higher attainment and decreased marital education gaps, more marriages and births were delayed past adolescence, the use of modern contraception increased, and there was early evidence of decreased fertility (Chicoine 2012). Abolishing school fees also has been shown to decrease fertility. In Nigeria, eliminating primary school fees—alongside investments to increase teacher and classroom volume—resulted in an overall increase of schooling and decreased early fertility by 0.26 for each added year of education (Osili and Long 2007). Similar results were found in Ethiopia (Pradhan and Canning 2013). In the United States, different states have different requirements for age-at-entry for primary school; in states where children are forced to delay and enroll one year later, results indicate decreased overall educational attainment but no difference in fertility (McCrary and Rover 2006). *Indonesia* undertook a large school construction program that was found to increase educational attainment for girls and decrease the educational gap between husbands and wives. There were also fertility effects for girls whose schooling thus increased, including delayed age at marriage; and for couples with decreased education gaps, there was lower fertility (Breierova and Duflo 2004).

Programs to offset the cost of primary school education show promise as a mechanism to reduce fertility. An experiment in *Kenya* that provided free school uniforms for the final years of primary school saw reduced dropouts among girls, as well as lower adolescent pregnancy rates and lower overall fertility (Duflo, Dupas, and Kremer 2011). Recent work in rural *Burkina Faso* highlighted the potential impact of pairing in-kind financial incentives (take-home food rations and textbooks, and in-school canteens) with infrastructure development (building new primary schools, capacity building for implementing partners) and demand-side activities (mobilization campaigns) that were targeted to areas with low enrollment rates for girls. Both boys and girls in program villages had greater school enrollment and higher test scores than children in comparison villages—and girls saw particularly favorable enrollment outcomes (Levy et al. 2009).

CCTs that provide financial incentives for secondary school attendance and achievement have not strongly affected fertility-related outcomes, however. Since its start as a pilot program in the 1970s, the Female Secondary School Assistance Project in Bangladesh has provided tuition subsidies and uniform stipends for girls in secondary school, conditional upon their remaining unmarried. Girls' enrollment and attendance now surpasses that of boys, but gains in educational performance are less clear. Although results indicate the program may have decreased adolescent marriage, other fertility effects have not yet been robustly explored (World Bank 2003; Fares et al. 2006; Jones, Harper, and Watson 2010). As part of the Progresa/Oportunidades CCT in Mexico, low-income households were offered education scholarships conditional on attendance and achievement, with higher amounts offered to girls and higher amounts offered at higher grade levels. The education attainment outcomes of the Progresa/Oportunidades CCT were large, with a near doubling of the likelihood in completing secondary school among girls between 1992 and 2009, and with educational attainment associated with increased use of contraception (Darney et al. 2013). Similarly, Bolsa Familia is a welfare program in Brazil that provides low-income households with income conditional on school attendance (as well as on childhood immunization, prenatal visits for pregnant women, and other conditions). An evaluation of this CCT found strong education attendance effects, but no corresponding decline in adolescent fertility (Gardner and Reynolds 2012). In contrast, a recent randomized experiment in rural *Burkina Faso* offered households either unconditional cash transfers or cash transfers conditional on regular school attendance for children aged 7–15. Both programs similarly increased attendance for boys, but the conditional transfer had a significantly greater effect on likelihood of attendance for girls (compared to the unconditional transfer) (Akresh, de Walque, and Kazianga 2013b).

Some programs work on skills-building for out-of-school girls in addition to, or in lieu of, traditional education incentives. An experimental CCT in Malawi offered school fee payments and cash transfers to schoolgirls if they remained in school, as well as to recently dropped-out girls if they returned to school. This increased educational enrollment and decreased dropouts among girls receiving the transfers, and it also had some fertility effects, including delayed onset of sexual activity by participants and postponed childbearing among girls who re-enrolled in school (Baird et al. 2010). The Berhane Hewan program in Ethiopia aimed to reduce child marriage; in addition to the community-based and family planning interventions discussed earlier, the program targeted education for girls in and out of school: school supplies/materials for in-school girls and skillsbuilding education (e.g., numeracy and literacy) for girls who had dropped out, resulting in increased school enrollment (Erulkar and Muthengi 2009). The Ishraq program for out-of-school girls in Egypt likewise had formal and nonformal education components, and the program saw strong results on a range of outcomes that might subsequently affect fertility (Selim et al. 2013). An ongoing project in Burkina Faso targets adolescent migrant domestic workers; the Filles Eveillées (Girls Awakened) project holds girls' group meetings to reduce social isolation; provides lessons on life skills, financial education, and health (including reproductive health); and offers linkages to health, financial, and psychosocial services in the community. Results to date indicate that girls in the program have an increased likelihood of holding a savings account, having feelings of a strong social safety net, and knowing modern methods of family planning and where to obtain them (Engebretsen 2013).

Evidence indicates that there is a link between female education and fertility, but programs have seen mixed results in trying to effect change along both dimensions. The **strongest positive evidence has been seen around primary schooling, and there are promising results from programs targeting out-of-school girls.** Secondary schooling interventions, usually CCTs, have not yielded robust results around fertility, although they are successful at increasing girls' educational attendance and attainment. It is possible that the complex mechanisms by which education affects childbearing—whether through increased intra-marital equity and female bargaining power about family size or through improved health literacy and comfort including around contraception, for example—are not well demonstrated in these relatively short-term studies. This area merits further research since these programs could potentially meet the dual goals of increasing girls' education and of reducing fertility.

Main Messages from the Global Review of Evidence

Table 4.1 presents a policy map of effective program implementation to accelerate the demographic transition, providing the policy and programmatic design lessons as well as investment recommendations emerging from the global review.

Table 4.1: Policy Map: Policy and Program Design Lessons and Investment Recommendations

DESIGN LESSONS	INVESTMENT RECOMMENDATIONS	
FAMILY PLANNING		
Supply + demand have more	Short-term	
impact than supply alone.	 Strengthen community-based distribution of contraceptives via existing health system. 	
Distribution of supplies and information by community members is better than distribution by health workers.	 Integrate/bundle family planning education and service delivery into existing health and nutrition services (standard ANC package, immunization days). Develop social marketing/SBCC strategy, in partnership with NGOs and private sector (where relevant). 	
Family planning education in	W. P	
ANC visits, immunization days,	Medium-term	
and nurse/midwife training helps.	Train community members on family planning and provide them with contraceptive supplies.	
Initiatives to reduce cost to client	• Facilitate community-level communications campaigns, including religious and traditional leaders. Ensure involvement of men.	
(subsidies, vouchers) result in	Introduce vouchers or other cost-reducing mechanisms,	
increased uptake of family	particularly for vulnerable groups (adolescents, low	
planning.	socioeconomic status households).	
SBCC strategies—radio and TV programs/dramas, community	 Launch media campaigns (radio, TV broadcasts) about family planning issues. 	
discussions, and reaching men—	Long-term	
increase knowledge and uptake.	Develop subsidies for family planning products.	
	AGE AT MARRIAGE	
Provide health (including family	Short-term	
planning) education to adolescents.	 Expand youth programs to include family planning, health, and education topics. 	
• Strengthen social support (mentoring, peer groups).	 Develop programs for peer-education among traditional and religious leaders about early marriage. 	
	Medium-term	
Conduct community discussions and involve traditional and	 Create mentoring and peer group programs for girls at risk for early marriage. 	
religious leaders.	Introduce community discussions about early marriage.	
Engage families, formally	Long-term	
(contracts, rewards) or informally (via visits and dialogue).	Develop interventions that target families, informally and/or with formal incentives (contracts, promised rewards).	
Pair individual interventions with community-based interventions.		

INFANT AND CHILD HEALTH

- Implement community provision of health supplies for infants and children.
- Provide postpartum education and peer groups around infant health care
- Use CCTs for routine and preventative health care, as well as nutrition subsidies/supplementation

- Short-term
- Integrate infant care into postpartum services.
- Support community distribution of health technologies for children via existing health system (vaccines, oral rehydration solution, nutritional support, antibiotics and antimalarials).

Medium-term

- Develop new mechanisms for community-based distribution of health technologies for children.
- Develop social programs (e.g., peer groups, social support for behavior change and demand-generation for child health care.

Long-term

- Introduce vouchers or other cost-reducing mechanisms for preventative/routine child health care.
- Develop nutrition subsidies/supplementation for poorest households.

EDUCATION

- Consider the potential for policy changes around mandatory years of schooling.
- Financial incentives (CCTs, fee subsidies, in-kind transfers) can be impactful, particularly around primary schooling.
- School construction may increase enrollment and attendance.
- There is more evidence on primary schooling and out-ofschool girls than on secondary schooling.

- Short-term
- Provide in-kind financial incentives for schooling: uniform subsidies, school canteens, take-home food rations.
- Design programs with rigorous evaluation designs (e.g., randomized experiments) for girls' schooling programs in the local context, with particular attention to primary versus secondary schooling, and measure outcomes that include fertility effects.

Medium-term

- Strengthen infrastructure (school construction).
- Offer fee subsidies and/or CCTs for vulnerable groups (areas with low enrollment, lowest-income households).

Long-term:

 Change policies about required number of years for primary schooling.

These results (family planning, age at marriage, infant and child health, and education) indicate that achieving the full demographic transition—and its accompanying economic benefits—may require strong political commitment and resource allocation to remove barriers (whether economic, logistic, or social) to family planning and to schooling, alongside community-based initiatives that operate at the local level. In settings where there has been strong commitment and allocation, such as Bangladesh, Indonesia, Iran, and Kenya, evidence indicates that fertility has significantly declined (in some cases rather rapidly)—an essential step in seeing the full social and economic benefits of a demographic transition and reaping the demographic dividend.

THE FOUR-COUNTRY POLICY SPACE ANALYSIS

The global literature summarized above is an excellent starting point for assessing the extent to which countries in the Sahel are already engaged in developing and implementing policies that can speed up the demographic transition. In the next phase, a three-stage policy framework was developed (see Appendix 1). This framework was applied through a case study approach to examine how four countries in the Sahel—Burkina Faso, Côte d'Ivoire, Mali, and Niger—have adopted and implemented policies around the demographic transition, particularly fertility change.

Burkina Faso

Results for Burkina Faso are presented in detail first for its multisectoral Politique Nationale de Population (National Population Policy; PNP), then summarized for reproductive health and girls' education. Results across sectors and policies for Burkina Faso are consolidated in Table 4.2.

Table 4.2: Policy Space Results: Burkina Faso

	ACHIEVEMENTS	OPPORTUNITIES
Financial resources	 Budgetary support New financing mechanisms (e.g., public-private partnerships for school) Increasing funding role of central and local governments 	 Allocate additional funding to address reproductive health demand-side barriers. Create more room for funding strategic activities (meetings, communication).
Stakeholder support	 High-level political leadership and championing (speeches, budget commitments) Policy endorsements from many sectors Constituency groups generally in favor of the policies (some reproductive health opposition from religious groups) 	 Gain policy endorsement from representatives outside the government. Provide opportunity for greater involvement of diverse stakeholders in implementation.
Institution building/ strengthening	 Institutionalization of structures to support policy implementation (NPC, DFH, DGIRE) Attention to capacity building (e.g., training national executive staff on population issues) 	Provide sufficient resources to new structures so they can carry out their mandates.
Monitoring for results	 Policies have quantifiable and measurable goals (e.g., population growth rate, TFR) There are M&E frameworks (e.g., in Population Action Plans, or PAPs) 	Coordinate and monitor across levels, both geographic and sectoral.

Note: DFH = Directorate of Family Health, DGIRE = ; NPC = National Population Council.

The PNP covers the period 2010–2030. It aims to decrease the population growth rate (from 3.1 percent in 2006 to 2.25 percent in 2030) and to achieve sustainable human development. The PNP has specific objectives to meet by 2030, including a TFR of 3.6 (a decrease from 6.2 in 2006), an increased contraceptive prevalence rate of 51.5 percent (this represents an annual increase of 1.5 percentage points), and increased life expectancy to 64.8 years (from the 2006 level of 57 years). The PNP is accompanied by Population Action Plans (PAP) to guide implementation; the current PAP (in its third iteration) covers the period 2012–2016.

- Financial resources: The PNP has a US\$29.5 million budget over the 2012–2016 PAP-III period. The majority of this is allocated to support supply-side strengthening activities (e.g., reproductive health and family planning). Funding for demand-side activities (SBCC and information) is comparatively low, especially for "strategic" activities such as integrating population into development plans and capacity-building for coordinating and monitoring population activities. There is also no planned funding increase over time, which is perhaps especially notable given population growth trends. New financing partnerships have emerged for PNP/PAP activities.
- Stakeholder support: There are several examples of government commitment to, and leadership on, population issues. First, the fourth pillar of the national economic development plan (Stratégie de Croissance Accélérée et de Développement Durable, or SCADD) is focused specifically on demographic issues—particularly population growth. Additionally, members of the government have shown proactive leadership on population issues: for example, the President chaired a 2011 conference on "Population, Development and Family Planning in Francophone West Africa" and the Minister of Economy and Finance is the president of the National Population Council and chairs the World Population Day commemoration. Third, the government communicates regularly about population issues: there is a quarterly newsletter and bulletin about population and development (BULIPOD) and a quarterly publication in newspapers with updated statistics on gender-based violence. Another example of government support for the PNP is a budget line item in the Finance Act for the purchase of contraceptives. And multiple sectors within the government have endorsed the PNP—although there is no endorsement to date from representatives outside the government (e.g., academia, civil society, or religious and other community groups).
- Institution building and strengthening: The Conseil national de la population (National Population Council; CONAPO) is housed within the Directorate General of the Economy and Planning/Directorate of Population Policies and is presided over by the Minister of Economy and Finance. It has been resourced (if not sufficiently), and has terms of reference; representation on CONAPO includes civil society as well as women. CONAPO enables communication between partners and stakeholders, which occurs via its General Assembly—but there are resource limitations for holding regular forums. CONAPO also has created networks of collaborators. The PNP has built capacity within the government, for example by training 60 national executive staff on the integration of population issues into development plans and programs.
- Monitoring for results: As discussed above, the PNP has quantified, measurable goals. The PAP includes an M&E framework, and PAP implementation monitoring reports are prepared. Challenges remain around coordinating and monitoring policy implementation across levels, both geographic (regional) and sectoral.

Additionally, this analysis explored separate sector-specific policies that complement the PNP in population and development issues. The Contraceptive Products Securing Plan (CPSP) 2009-2015 was developed to ensure sustainable financing and a strong supply chain for reproductive health commodities and for the provision of and demand for quality reproductive health care services, as well as intra- and inter-sectoral coordination and M&E. The CPSP is accompanied by a Consolidated Action Plan for Family Planning (2013-2015). The budget is US\$110 million, mostly for commodities and operating costs, with an increasing share coming from government sources by 2015; the annual action plan includes annual needs-based budgeting. The government has relevant budgetary line items, into which it has allocated funds since 2007. There are also new mechanisms for financial support for contraception from outside partners-for example, a World Bank project (US\$28.9 million) that uses results-based financing in five regions of the country to provide a package of reproductive health services (Health Policy Project 2013a). Burkina Faso has seen high-level representation at international conferences on reproductive health and family planning, and there are policy champions specifically for reproductive health, including the country's First Lady. Most constituency groups are in support of the policy, and are seen to have access to sufficient resources to enable implementation (with the possible exception of the private sector), although some religious groups having voiced opposition. New structures were created under this policy, including the Directorate of Family Health (DFH), but the DFH may not be sufficiently resourced in terms of human (quality and quantity) and financial resources.

Additionally, there is a 10-year Stratégie nationale d'accélération de l'éducation des filles (National Strategy for Accelerating Girls' Education; SNAEF) (2011-2020) that addresses all levels of education, plus nonformal education and vocational training. Implementing partners include ministries (education, regional, and municipal development), NGOs, and the private sector. SNAEF's strategic objectives include improving social mobilization and capacity building for girls' education, improving the school environment, and accelerating access to education for girls, as well as boosting retention and academic achievement, curbing violence against women in family and school settings, and promoting nonformal basic education, literacy, and technical and vocational training. Multiple ministries have budgets within the SNAEF allocation plan, and most funds are allocated for access to formal education programs, especially basic (primary) education. There are diverse budgetary sources: the private sector already partners on education policy implementation, municipalities will begin to contribute, grant proposals are being written for global organizations, and donors have established a pooled Global Partnership for Education. There is political and constituent group support for education programs, and high-level government commitment to education is also seen via budget priorities: almost one-fifth of the national budget is earmarked for education activities. SNAEF created a Directorate for the Promotion of Girls' Education and Gender, as well as a Directorate General of the Institute for the Reform of Education and Training. There are formal program goals, and these are linked to a monitoring framework and evaluation and revision plans.

The legal environment in Burkina Faso has recently become more favorable to population-related policies such as these. In 2005, the Reproductive Health Law was passed, overturning a nearly century-old law that prohibited family planning. This new law guarantees the right of individuals and of couples to reproductive health, and equitable access to reproductive health care. A recent analysis found, however, that the law has not yet been fully applied and that many people (including some health care providers) were still unaware of its provisions (Health Policy Project 2013a).

Côte d'Ivoire

Results for Côte d'Ivoire are presented in detail first for its multisectoral Politique Nationale de Population (National Population Policy; PNP), and then summarized for reproductive health and youth promotion. The results are consolidated in Table 4.3.

Table 4.3: Policy Space Results: Côte d'Ivoire

	ACHIEVEMENTS	OPPORTUNITIES
Financial resources	The Reproductive Health Strategic Plan (RHSP) has a resource mobilization plan.	Must develop a resource mobilization plan for the PNP.
Stakeholder support	 Government is engaged in public support for policies (e.g., PM speeches, First Lady advocacy for PNP). Most constituency groups support the policies. 	 Greater involvement of civil society is needed. Enhance media engagement to improve objectivity and increase public support.
Institution building/ strengthening	 New structures created (e.g., National Population Office; regional directors for youth) Some capacity-building efforts are underway (continuing education and training for clinical staff). 	 Increase engagement of civil society and private sector. Develop and implement capacity-building activities for service delivery and management staff.

	Policies include directives about collaboration.	Develop clear mechanisms for collaboration across implementing partners.
Monitoring for results	 Policies have clear and measurable goals. Reproductive health and youth policies have M&E frameworks with responsible units. 	 Develop an action plan to translate PNP goals into the M&E framework. Enhance M&E by reaching beyond process and output indicators.

The PNP was adopted after a review in 2010 of the earlier National Population Policy Declaration, whose full implementation had been hindered by a period of civil war and unrest. The PNP has six goals: (1) controlling population growth, (2) managing international migration to create an opportunity for sustainable human development, (3) developing human capital for economic development, (4) improving people's quality of life and the environment, (5) promoting gender equity and equal opportunity. (6) and improving care of vulnerable groups.

- Financial resources: The PNP does not have a resource mobilization plan.
- Stakeholder support: The government has demonstrated commitment to population issues. Goals of the PNP are included in the National Development Plan (and within the UN Development Assistance Framework). Additionally, the Prime Minister, as well as other ministers and the First Lady, have all been involved in public addresses and events about population issues. Examples include participation in the World Population Day and global meetings such as ICPD+20 and Busan 2013. Fragmented efforts have also been made to involve media (such as radio and television broadcasts on relevant issues), but there does not appear to be an overall comprehensive communication strategy for the government. Civil society is perceived as poorly resourced. There appears to be considerable room for involving civil society in the design and implementation of the PNP operational plan; this can in fact build upon their current participation in annual work plans and national-level planning activities, as well as their involvement in periodic reviews of the UNFPA cooperation program.
- Institution building and strengthening: The National Population Office (NPO) was established in 2012. It has terms of reference and a chairperson. There is an opportunity for stronger government participation in the NPO, as well as for including civil society and the private sector. The NPO has a modest state subsidy, which seems to be insufficient to achieve its terms of reference. Additionally, there is room for improvement in collaboration across groups—for example, in establishing clear mechanisms for collaboration across implementing partners.
- Monitoring for results: There are clear and measurable goals for the PNP, but there is no
 action plan to operationalize them. Furthermore, there is no M&E framework in place to
 measure the extent of implementation or achievement of the PNP goals.

Additional sectoral policies in support of population and development issues were also analyzed. First, the Reproductive Health Strategic Plan (RHSP for the period 2010–2014) aims to reduce fertility (from 4.6 to 3.5 by 2025) by promoting family planning, improving the welfare of women and young girls, enhancing the delivery of quality reproductive health services, engaging men as partners in reproductive health, and information and advocacy around cultural norms such as ideal family size. This RHSP is accompanied by a resource mobilization plan and operational plan. The annual government budget for the RHSP was approximately US\$694,000 and allocation was US\$419,000 in 2014. The UNFPA and the United Nations Development Programme (UNDP) together contributed about US\$14 million that same year. The RHSP has received favorable treatment from the media, and the public as well as constituency groups are seen as supportive:

NGOs are actively promoting reproductive health. The RHSP works within the existing health system, so it suffers from the same resource constraints (human and financial). There are ongoing capacity-building efforts for clinical and managerial staff, and existing directives to encourage cooperation both within the health sector and between sectors as well as with outside partners—but no concrete channels of communication or metrics to assess the collaboration exist. The RHSP operational plan includes an M&E framework linked to the RHSP goals, but the M&E indicators focus on processes and outputs rather than results.

There is also a National Youth Policy (NYP) for the period 2010–2016 that involves activities around sensitization, risk protection, and empowerment. Although the NYP budget is perceived as insufficient, particularly at start-up, there are provisions for scale-up over time and for sustainability. There are policy champions from government, the UN system, and NGOs, as well as celebrities and traditional leaders. Many groups support the policy as does most public opinion, and there are public-private partnerships to help implement it. Media treatment is not consistently favorable, however, and is perceived to be sometimes nonobjective. The policy created new structures, such as "Youth Cafes" and new regional and departmental directors. Human resource capacity is considered to be of insufficient quality, although there are plans to increase service delivery and management capacity.

There are new changes to the enabling legal environment in Côte d'Ivoire, such as recently passed laws on marriage (focused on equity issues) and domestic violence.

Mali

Results for Mali are first presented in detail for its multisectoral Politique Nationale de Population (National Population Policy; PNP), then summarized for girls' education, reproductive health, and gender. A number of other policies have been developed around population issues, including plans to target certain groups (e.g., adolescents, men), and to address both supply-side (e.g., procurement and distribution) and demand-side (e.g., communication) factors (Maiga 2012). The results are consolidated in Table 4.4.

Table 4.4: Policy Space Results: Mali

	ACHIEVEMENTS	OPPORTUNITIES
Financial resources	PNP emphasizes education and reproductive health	Increase PNP budget disbursement.
	Budget sources (for girls' education) include government, local authorities, private sector, and donors	Increase budget over time to keep pace with population and demographic changes.
Stakeholder support	 Government has exhibited commitment to all four population policies. Evidence of policy advocacy and championing (e.g., President's speech about demographic transition). Support from many constituency groups for PNP (except some religious groups on reproductive health, men's groups on gender policy) Media and the public are mostly supportive of girls' education. Mechanisms are available to disseminate information 	 Increase the involvement of civil society in implementing the Programme Prioritaire d'Investissement en Population (PPIP). Social constraints hinder full policy implementation. Build support among constituents for the gender aspects within policies Demonstrate government commitment by creating gender committees/units within ministries.
Institution building/ strengthening	 New structures have been created (e.g., NDP, Ministry of Women's Promotion) Implementing groups have mechanisms for collaboration, and they have clear roles and responsibilities. 	 Lack of institutional capacity on population issues in NDP & ministries Increased resources for collaboration activities Strengthen human resource quantity
Monitoring for results	 Some policies have clear targets (e.g., Edu for All) All have M&E plans and clear monitoring duties. 	 Quantifiable objectives for the PNP Better estimates of needs Increase results-based policy planning and monitoring

Mali adopted a PNP in 1991 and revised it in 2003. The PNP was first accompanied by priority investment programs in population (PPIP 1998–2002 and PPIP 2004–2008), which guided policy implementation throughout the country with specific regional plans. The second PPIP was evaluated in 2009 and a new Priority Action and Investment Program in Population (PAIPP, for the period 2010–2014) was developed in response. Because of the positive population growth, this PAIPP had a specific focus on fertility reduction.

• **Financial resources:** Over the current five-year PAIPP period, Mali's PNP has a US\$29.9 million budget for activities related to education; reproductive health; gender, population and development; migration, urbanization and land management; policy management and

coordination; and information, education, and communication (IEC)/BCC. The biggest line items are education (US\$11 million) and reproductive health (US\$13 million). Approximately 20 percent of the overall budget has been disbursed.

- Stakeholder support: Mali has included population issues in their poverty reduction plan—the Cadre Stratégique pour la Croissance et la Réduction de la Pauvreté (Strategic Framework for Growth and Poverty Reduction; CSCRP), and in sector-specific policies. Additionally, high-ranking government officials exhibit proactive leadership on population issues—for example, the President made a New Year's speech about the demographic transition, and there are ministerial speeches on related matters. The PNP has been endorsed by the relevant ministries, as well as civil society (including women's and religious groups), the private sector, donors, UN partners, and the World Bank. The wide range of civil society groups involved in the PNP demonstrates diversity of participation. Civil society has been included in planning and budgeting for PNP, but less so in implementing activities—perhaps due to limited financial support/insufficient resources. On constituency-building via communication, there is a semi-annual informational bulletin about population issues (*Pop Info Mali*).
- Institution building and strengthening: The National Directorate of Population (NDP) has been created, with a mandate and some budget, though it is reportedly insufficient. The head of the NDP also chairs the National Commission on Population and Development, which has terms of reference and approximately 50 members from a range of groups including civil society (NGOs and women's, youth, and religious groups) and the private sector. The budget for the National Commission is controlled by the NDP. There appear to be mechanisms for collaboration through several structured bodies; however, optimal collaboration has not been feasible because of resource constraints. In general, there is a lack of institutional capacity on population issues within NDP as well as within the sectoral ministries.
- Monitoring for results: The PNP does not list its goals in terms of quantified and measurable objectives. The NDP is responsible for monitoring implementation, following an M&E framework. The PNP and PAIPP are subject to periodic reviews and are revised according to findings.

Other programs and policies accompany the PNP in addressing population and demographic issues. For example, the third phase of the Programme d'Investissement du Secteur de l'Education, III, (Education Sector Investment Program; PISE), 2010-2012) aims to improve the quality and efficiency of the Malian education system, with a particular eye toward closing the gender educational gap. It builds on experiences from past policies and assessments, and incorporates recommendations from a national forum on education. The biggest budgetary share goes toward strengthening the functional literacy of women and out-of-school girls; additional items include transitioning community schools into public schools, and student retention in rural areas throughout basic education. Budgetary sources include the government, local authorities/communities, the private sector, and other donors—and the budget is perceived as not keeping pace with the policy's accelerated enrollment strategy, and thus as insufficient. The Malian government sees education as key to development, as shown in various policy documents and agreements, and there are policy champions from the government and from civil society. Media and the public both have positive opinions of the policy. But social constraints are seen as a hindrance to full policy implementation, although no specific constituency groups were mentioned as opposing the policy. The policy documentation clearly outlines roles and responsibilities for implementing groups, and the hierarchy is reportedly clear. There are communication mechanisms outlined in the policy. It is perceived that human resource quality may be insufficient to perform the policy activities, and capacity building needs to be addressed. Political support changed the M&E Unit to the M&E Department under this policy, and the Program Minister oversees monitoring efforts. Policy planning is seen as not being sufficiently results-based, partly because estimates of the number of school-age children are perceived as unreliable.

Additionally, a Reproductive Health Strategy is included within the Programme d'investissement secteur santé (health sector investment program; PRODESS) (10-year socio-health development plan). Key program areas include improving women's access to health care services, reducing female genital mutilation and violence against women, and reducing pregnancy at youngest and oldest ages. The policy is evidence-based and cites best practices. There is support for the policy from all levels of government and from civil society, but there is opposition from some religious groups.

Last, the Politique Nationale Genre du Mali (the Mali National Gender Policy; PNG-Mali) was adopted by the Council of Ministers in 2010 and is accompanied by an Action Plan. It positions gender equity as a key component of human and economic development. It was designed to incorporate an institutional entity for steering, coordinating, and monitoring the policy so as to improve implementation and see greater policy impact (as compared with earlier efforts in gender policy). There are policy champions from UN Women and the UNFPA as well as from the government; women's groups support the policy, but some men's groups are in opposition. Despite government documents about the importance of gender issues, this policy experienced pitfalls during its adoption, including public resistance to the original name of the policy (National Policy for Equality between Women and Men), which resulted in a name change to the current PNG-Mali. The policy created a new Ministry of Women's Promotion, in addition to a new Permanent Secretary, a High Council and Regional Councils of National Gender Policy, and committees within 10 sectoral ministries.

The legal environment in Mali is generally favorable toward population issues: the 1990 population policy states that any woman, with or without parental or spousal permission, can have access to family planning. This was reaffirmed in the Reproductive Health Law of 2002 (Maiga 2012). The legal age at marriage, however, is still only 15 years.

Niger

Results for Niger are presented first in detail for its multisectoral Population Policy Declaration, then summarized for girls' education and reproductive health. Population-related issues can be seen throughout Niger's 2012–2015 Plan de Développement Economique et Social (Economic and Social Development Plan; PDES), which has five pillars: improving public institutions, fostering balanced and sustainable development (including addressing the determinants of population growth), improving food security and sustainable agricultural development, developing a competitive and diversified economy, and promoting social development (including health improvements, particularly among vulnerable groups). The results across sectors and policies for Niger are consolidated in Table 4.5.

Table 4.5: Policy Space Results: Niger

	ACHIEVEMENTS	OPPORTUNITIES
Financial resources	 Financial support is available from development partners for population-related activities. An increasing share of the national education budget is available for girls' education. 	 Increase government commitment to financing population policy activities. Budget should keep pace with population growth and with changing demographic profile/needs.
Stakeholder support	 Government officials exhibit leadership (e.g., President's speech in 2013; Prime Minister led the opening ceremonies of National Forums on Population Issues). High-profile support is evident (e.g., First 	Continue the leadership already exhibited.

	Ladies, celebrities). • Policies are supported by many groups (except some religious groups with regards to reproductive health and education)	
Institution building/ strengthening	 New structures have been created (e.g., Conseil national de la population; CONAPO, new unit in national education directorate) CONAPO includes civil society and private sector; Ministry of Population facilitates communication among implementing partners. 	 CONAPO is not yet operational and resourced to carry out terms of reference. Attention must be paid to increasing human resources quantity and quality (e.g., build on reproductive health technical capacity and training)
Monitoring for results	 Policies all have operational plans with goals and M&E frameworks. The Déclaration du Gouvernement en matière de Politique de Population (DGPP) has a measurable goal. 	There is a choice of indicators.

The Déclaration du Gouvernement en matière de Politique de Population (Niger Government Population Policy Declaration; DGPP) was adopted in 2007. Its goal is to decrease population growth by addressing contraception and early marriage, with the overall objective of contributing to poverty reduction. It aims to increase contraceptive use by at least 1 percentage point per year; to meet this goal, the policy seeks universal access to safe, effective, affordable, and acceptable local reproductive health services by 2015. There are four priority programs: advocacy and awareness on population and development issues; information, education, and communication for behavior change (IEC/BCC) in reproductive health; promotion of access and use of reproductive health services, particularly around birth spacing; and women's economic advancement. The declaration is accompanied by a strategy document for DGPP implementation (2007–2015).

- Financial resources: Population issues are being financially supported by development partners, perhaps without a strong financial commitment from the government. Budgetary issues are particularly relevant given the nature of DGPP-related activities—for example, their focus on SBCC, for which activities can be quite costly—and the largely rural population in Niger, which may increase the cost of implementation.
- Stakeholder support: The poverty reduction strategy includes population growth issues, and population growth is highlighted in the PDES as discussed above. Additionally, there are examples of high-level government officials exhibiting leadership on population issues: the Prime Minister has taken an active role at national forums on population topics, and the President highlighted population, development, and women's empowerment during a recent visit by the UN Secretary General and the World Bank. There was also a 2008 National Forum on Population Issues, with an opening ceremony led by the Prime Minister. And the 2014 National Forum on Population Issues just occurred; the Prime Minister again led the opening ceremony, and the remaining four-day meeting convened technical experts, religious leaders, and youth group leaders to discuss population issues. The DGPP strategy document was endorsed by relevant actors (representatives from ministries, civil society, opinion leaders, technical and financial partners, etc.). Finally, the UNFPA supported the creation of a communicators network to promote information on population issues. It targets public and private sector journalists, and trainings are provided by the UNFPA and by the government on population topics.

- Institution building and strengthening: The National Population Council (CONAPO) was
 established in 2009 but is still not operational. Membership includes civil society and private
 sector representation, but it does not appear to have active government leadership. It also
 has not been resourced to carry out its terms of reference, including acting as a coordination
 body. Collaboration between partners occurs during joint review meetings led by the Ministry
 of Population and meetings convened by donors; the donors themselves are coordinated by
 the UNFPA.
- Monitoring for results: The DGPP has a quantifiable objective, and the operational plan includes an M&E framework. M&E activities are coordinated by the Ministry of Population, Women's Affairs, and Child Protection in collaboration with the sectoral ministries (especially Health and Education).

Additionally, policies within education and reproductive health were analyzed as sector-specific strategies to address issues of population and development. The National Policy Document relating to Girls' Education and Training in Niger includes a strategic objective to "Develop a Communication Strategy for Behavior Change in Girls' Education and Training in Niger." Its overall objective is to increase social demand for girls' education and training. Over the past decade, girls' education has seen a growing share of the national education budget (mostly for primary schooling)—it has risen from 0.9 percent in 2004 to over 6 percent in 2010. There are policy champions for girls' education at the local level ("village model women"), and national support from Girls' Education Ambassadors, which include celebrities. Many women's groups support the policy, as well as prominent women such as those in Parliament and Ministers, as well as traditional authorities. A few religious leaders oppose the policy. The policy created a new unit in the national directorate, with regional branches throughout Niger, and there are clear roles and objectives for policy implementation, but performance evaluations are not yet operational. It is perceived that there are sufficient human resources to implement the policy, although quality may be lacking—but the policy includes activities to strengthen capacity, such as training modules and workshops targeted at service delivery staff. There is an operational plan with formal program goals and a monitoring framework—but there is no mechanism for reviewing these results or adjusting the policy accordingly.

One priority of the Niger Health Development Program (Programme de Développement de la Santé; PDS) 2011-2015 is to develop quality reproductive health services via five intervention packages: family planning, adolescent and youth health, child health, mother and newborn health, and male health. Budgetary resources, although rising, may be insufficient given increasing needs of the population (the country's population growth rate is high, at 3.9 percent currently). Almost all financing for contraceptive supplies in Niger comes from the UNFPA: nearly US\$2 million in 2009 (triple the 2006 amount). In 2010, the government established a budgetary line item for the purchase of reproductive health products, including contraceptive supplies, and has disbursed approximately US\$122,000 annually since then (Health Policy Project 2013b). There is a champion network to mobilize resources in support of the Abuja Declaration, and the First Ladies have championed this policy. There is political support for the reproductive health policy, as exhibited by infrastructure development, free family planning service provision, and inclusion of family planning in clinical training modules as well as support from multiple constituencies (including civil society, NGOs, youth groups, and women's associations), although there is some opposition from religious groups. Human resource constraints have been recognized, and efforts made to ameliorate them, including technical capacity building (via continuing education, refresher courses, and supervision) and provisions to deploy doctors to rural areas. There is an M&E framework—although the overall policy does not have a quantified objective (rather, it focuses on universal access and meeting the health-related Millennium Development Goals).

There are some possible challenges to effective policy implementation within the legal environment in Niger. For example, the legal minimum age for marriage is only 15 years; and there are legal barriers to girls' education (although these are under discussion at the National Assembly and may soon be removed). On the other hand, the 2006 Reproductive Health Law established reproductive health as a fundamental right, and, as mentioned above, this same year

the government declared that reproductive health services (including contraceptive methods) would be available for free in public health facilities.

Main Messages from Policy Space Analysis

The policy analysis indicates that the study countries—Burkina Faso, Côte d'Ivoire, Mali, and Niger—have made substantial progress in designing policies to catalyze the demographic transition, particularly on issues related to fertility change. Each country has adopted a multisectoral population policy that addresses key determinants of population across areas such as health, education, gender, and youth. Designing and adopting good policies, however, is not sufficient to see success, and much remains to be done for effective policy translation and implementation. The details of the policies differ within and across countries, but some regional themes emerge around policy design, translation, and implementation.

On issues of policy design: there is room to expand the scope of the existing multisectoral and sector-specific policies: for example, by increasing attention to demand-side factors and by comprehensively addressing all levels and types of education. Relatedly, the multisectoral population policies at present largely address issues of health and education—but a wider view may be necessary to reap full benefits from the demographic transition. More comprehensive multisectoral policies might also touch upon issues of women's empowerment, economic development, employment, the environment, and needs of the elderly.

On policy translation, the second stage of the policy process: many of the analyzed policies were accompanied by action plans to facilitate policy translation—but this was not universally true, and there is an opportunity to develop such plans to catalyze and strengthen implementation. It is important that action plans touch upon the dimensions of policy implementation as seen in Table 4.1—for example, resource mobilization, organizational design, monitoring, and so on. Additionally, in several cases, the policies analyzed here are current-day versions of older policies, and some of these updates and revisions had been based on evidence of results. Accordingly, it may be beneficial to develop and continue to foster such mechanisms and processes to ensure policy reviews (and policy revisions, as appropriate).

The remaining findings discussed here focus on the third stage of the policy process: **policy implementation**. There are several opportunities for strengthening the policy space for the demographic transition in the subregion. First, it is remarkable and promising that many of the policies analyzed here included provisions to create new organizational structures for implementation. Resource allocation and mobilization plans should ensure that these new entities have sufficient resources—financial, human, and technical—to fully carry out their terms of reference. Such structures may be essential for successfully implementing policies, including coordinating program partners; communicating with the media and the public; and overseeing monitoring, feedback, and revision processes. These strategic activities are important but often underfunded. Funding should also be increased for demand-side initiatives (corresponding with the above recommendation that policy design increase emphasis on addressing demand-side issues). It should be noted that new organizations are not always the answer to implantation challenges, but the need for strengthening organization (new or existing) and resourcing them is critical.

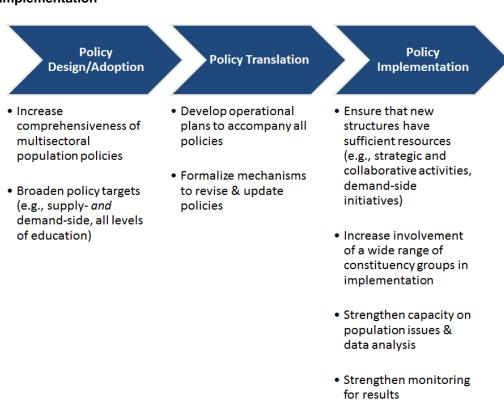
Second, there is opportunity to increase a greater number and breadth of constituency groups in implementation—from policy endorsement to resource planning, program activities, and monitoring. Some policy action plans have leveraged partners ranging from civil society to the private sector, and these may offer examples and lessons learned for how to successfully engage a range of constituency groups in various policy implementation activities.

Third, countries may wish to strengthen capacity on population issues and on data analysis. Shortcomings in technical capacity around demography may lead to challenges in data collection and analysis (e.g., generating estimates of needs on which to base policy targets, identifying determinants of outcomes, etc.) in M&E activities, and in evidence-based policy analysis during the design or review phases.

Finally, monitoring for results is an essential part of the policy-implementation cycle, both for developing and revising strong policies and for adapting activities and resource mobilization. There is opportunity to strengthen how monitoring is incorporated in policy design and how it is implemented via the policy action plans. Policies should be written with quantified, measurable goals at the outcome or impact level—and policy action plans should specify how monitoring is conducted to assess progress against these goals. The action plans should identify what is measured (including process, output, outcome, and impact indicators); who is responsible for collecting, analyzing, and reviewing monitoring data; how frequently is this performed; how results are disseminated; and what feedback mechanisms ensure that policies and implementation plans can adjust to these findings.

The recommendations on policy design, translation, and implementation that have emerged from the analysis of the case studies are summarized in Figure 4.1.

Figure 4.1: Summary of Recommendations on Policy Design, Translation, and Implementation



PART V – PRIORITIES FOR POPULATION IN THE SAHEL

The three analytical pieces summarized in this report allow a clearer picture of the population dynamics in the Sahel region. The quantitative, qualitative, and policy space analyses provide an integrated framework of *what*, *why*, and *how*. The *what* refers to getting a better picture of the current status of the population dynamics in the region and determining how it is projected forward with commonly used assumptions. This is mainly an empirical exercise captured, in Part II. Part II also begins to look at the *why* by quantitatively explaining the factors that are driving critical variables such as fertility rates. The *why* analysis is expanded through qualitative investigations and deepens the understanding of the critical household decisions around the demand for children and the cultural norms and socioeconomic factors that influence such decisions. That deeper understanding of the *why* provides important insights into *how* policies and programs can be structured to speed up the demographic transition. The *how* is also helped by the policy space analysis, which summarized global evaluated best practice of what works and reviewed how four Sahel countries are currently doing in their policies to address population dynamics by identifying achievements and opportunities.

Ultimately, population policy is a national exercise that takes into account country-specific population dynamics, available policy space, and cultural and social factors that represent the fabric of a nation. This report is not meant to provide country-specific policy advice but rather to learn from a cluster of countries that neighbor each other physically and culturally. Consequently, this report is meant to use the subregional analysis and the global evidence to help countries develop priorities in how they address population dynamics. As was described at length in Part I of the report, how countries choose to address population issues will have lasting implications for human capital (health and nutrition of children and mothers, educational investments, skills development, women's empowerment); for opportunities or challenges to economic factors (labor markets, dependency ratios, savings and investments); and for critical developmental issues (poverty rates and potential political instability). The stakes are very high.

WHAT IS THE POPULATION PICTURE IN THE SAHEL?

Critical issues that stand out for this region include:

- The eight countries reviewed include some of the fastest growing populations in the world. In small part, this population growth is the result of declines in child mortality, but its dominant driver is very high fertility rates. As noted in Part I, fertility-driven population growth is detrimental to the accumulation of human capital.
- Total fertility rates (TFRs) for these countries are among the highest in the world. Especially unusual, given global experience, is that the demand for children remains high in many of these countries. Fertility rates have stagnated and in a few cases, such as Niger, have actually gone up despite declining child mortality.
- The age structures in the countries in this subregion are among the youngest in the world. Median ages are between 15 and 19, and the median age for Niger is expected to remain flat for the next two decades. The implications for population momentum are staggering even if fertility rates decline fast. The consequences for the health and education sectors are also notable—these sectors will require substantial financial resources to support public service delivery.
- Health outcomes are mixed, with persistently low life expectancy and very high malnutrition rates that impact long-term human capital, more steady declines in infant and child mortality rates, and slowly declining but still far too high maternal mortality rates (especially in Chad).
- The combination of declining child mortality and persistently high fertility has resulted in high young-age dependency ratios in many of the countries in the Sahel. This means that

there are few working age adults supporting a relatively large number of children under age 15, which does not bode well for resource allocation at the micro level and economic productivity and growth at the macro level.

WHY HAS THE REGION LAGGED ON THE DEMOGRAPHIC TRANSITION?

The quantitative and qualitative analyses offer the following explanations for the current demographic picture of the region:

- Age at first marriage is almost universally very low, especially in Chad, Mali, and Niger.
 Linked to marital age in this region is age of sexual debut (Côte d'Ivoire is somewhat of
 an exception, with a gap between age of first sexual contact and of first marriage). A
 linked variable is the median age at first birth, which is very early in countries in the region
 (Chad is an exception).
- The region also exhibits low levels of the use of modern methods of family planning, which is linked to a consistent desire for large families. The ideal number of children remains high even among women with higher education and those in urban areas or from wealthier households (Benin shows the lowest number of desired children of the eight countries). There has been a decrease in ideal family size in all but Burkina Faso, Mali, and Niger.
- Findings from the qualitative analyses provide important hints as to why demand for children remains high. First, it appears that having many children as old age insurance remains a strong motivation, which could mean that the decrease in infant and child mortality has not been fully appreciated yet or has not reached levels that change societal perceptions. Second, the cost of raising children is not as high as it might be because of the phenomenon of child fostering. Third, there are strong religious interpretations around the desirability of children. These interpretations are further reinforced by the strong influence of religious leaders in the Sahel. Fourth, even when women prefer to limit the number of children, often husbands prefer larger families and have the stronger decision-making power within the family.
- In addition to the high demand for children and low demand for family planning services, there also appears to be some family planning service delivery challenges that have decreased demand. First, unbundled (vertical) family planning service delivery makes it difficult for women to seek care when sociocultural norms are important or when spouses disagree. Second, family planning providers appear to have limited information about side effects of different methods, which introduces uncertainty and deflates demand. Third, family planning services are currently seen as a way to limit the number of children, rather than as a means to space them. Finally, limited pre-service training for family planning providers appears to have an impact on demand for care.
- Qualitative research found that there is societal pressure for early conception after marriage but that demand for contraception increases mainly as an economic factor after having a number of children. Research also found that stimulating the use of family planning is seen in a more positive light if it relates to impact on the health of women and children.
- Supply-side factors impacting education negatively in many countries include: (1) problems with access in rural areas, starting with primary school dues; (2) in some cases, the quality of school infrastructure is lacking; (3) the lack of qualified teachers has contributed to the decline in the quality of education (low morale and high dropout rate of teachers); (4) the lack of suitable housing, especially for girl students, for both secondary and university education.
- Demand-side factors impacting education negatively in many countries include: (1) girl drop out as a result of family demand; (2) financial barriers to secondary education (fees, uniform costs, high transportation costs, rent); (3) traditional values that do not support

education attainment for girls (because it is perceived as getting in the way of early marriage and childbearing); (4) low motivation as a consequence of perceived limited opportunities in the labor market for women.

How Can Sahel Countries Address Population Dynamics?

The quantitative and qualitative analyses make a strong case for countries of the Sahel to prioritize the acceleration of the demographic transition if they are to escape poverty traps and pursue the potential of an economic demographic dividend. At the current rate of change, it is highly unlikely that population dynamics will be advantageous to countries in terms of improving human development or strengthening economic outlook. Declines in mortality, especially for infants and children, is a success story in the Sahel—but when combined with persistently high fertility, they have expanded the base of the population pyramid with no substantial change in the demand for children. This means that continued levels of very high fertility will neither create a youth bulge (the base of the pyramid will continue to grow) nor will the youth be healthier, less malnourished, or better educated (human capital formation will be slow). Moreover, with high fertility rates, women's health, education, wage-earning, empowerment, and contribution to the economy will be stagnant.

The quantitative and qualitative analyses not only suggest the need to prioritize fertility for speeding up the demographic transition, but also highlighted four ways that this could be done. Interestingly, most of the *what to do* messages are consistent with global best practice but do not take into account subregional sociocultural norms:

- 1. Central to the speeding up of the fertility transition is the remaining high demand for children. Driving that strong demand for children are sociocultural factors requiring that policy and messaging target men and religious leaders as well as women. The global review of successful programs offers a number of tools and examples of programs that launched creative media campaigns and engaged religious and traditional leaders in community-level dialogue around reproductive health topics, ensuring the participation of men. These demand-side efforts will, however, be challenged by the limited reach of mass media in the Sahel and will therefore need to harness other communication approaches at the community level.
- 2. Also important is the continued concern about child survival and the demand for children as security for old age. Addressing this concern will require both the acceleration of improvements in infant and child health and nutrition as well as the improvements in the educational system that will allow better investments in surviving children. The global reviews offer a number of examples of countries within and outside Africa that have been successful in improving education systems, especially for girls, as well as strengthening health systems.
- 3. Weaknesses in the provision of family planning services have contributed to the low demand for contraception. Integrating family planning into overall reproductive, maternal, and child health and nutrition services helps address concerns of women and improves access and utilization by reducing societal disapproval and opportunity costs for women as well as minimizing service delivery costs. Improvements in service delivery training of providers, including learning more about potential side effects of different family planning choices, can also increase uptake and may change demand. In addition, the global review found that strengthening community-based delivery of supplies, information, and care to be very effective. Moreover, a large percentage of family planning services in the Sahel are delivered through nonpublic sectors; building partnerships with the NGO and for-profit private sectors have been found to work in a number of countries, especially around issues of social marketing and behavior change communication. Demand-side interventions such as targeted vouchers or cost and fee reductions for vulnerable groups have also been successful.

4. The issues around age at marriage are more challenging to address through service delivery programs. The qualitative analysis and the global experience point to the critical function of engaging traditional and religious leaders. Messages around the impact of early child bearing on the health of mothers and children as well as the costs of child rearing may be helpful. Youth programs that include health education may also be effective.

Finally, policy mapping country case studies were conducted in order to better assess where countries currently stand on addressing population issues and to assess the available space for moving forward. The good news is that all countries reviewed have developed multisectoral approaches to population policy. Although some modifications and improvements to policy content will be helpful—for example, expanding the scope of the existing policies to pay more attention to demand-side factors—the real challenges and opportunities moving forward relate to turning policies into operational realities with successful implementation.

An important, and in some cases missing, step in turning policies into reality is developing functional operational plans that can catalyze implementation. This step includes planning out resource mobilization, organization and institutional design, and monitoring systems and frameworks. Moreover, the review of operational plans found a need for updates and revisions based on new evidence and implementation findings. The field is evolving and population needs and aspirations are changing, so having mechanisms to review and update operational plans is important.

In terms of implementation of policies, there are several opportunities for strengthening the policy space for the demographic transition in the subregion:

- Policies are not always matched by resources (financial, human and/or technical) and organizational structures needed for full implementation. This is particularly true for coordinating program partners; communicating with the media and the public; and overseeing monitoring, feedback, and revision processes.
- 2. The nature of the topic and the strong sociocultural norms make it critical to engage with a great number of constituency groups in implementation—from policy endorsement to resource planning, implementing program activities and monitoring.
- 3. Data generation and analysis are central not just to design issues, but also to implementation and adaptation, so countries may wish to strengthen their capacity on population issues and on data analyses and the use of information.
- 4. Related to the last point about data, monitoring for results is an essential part of the policy-implementation cycle. There is opportunity to strengthen how monitoring is incorporated in policy design and how it is implemented.

A FEW CONCLUDING THOUGHTS

The policy agenda outlined above is critical for improving the lives and prospects of the people of the Sahel, but it is also very challenging. Each of the countries analyzed continue to experience population growth for a long time, but a population growth trajectory that allows for a consistent investment in human capital is a worthy national priority. Three additional issues need to be considered: Strong political commitment, short- and medium-term perspectives, and matching population dynamics to economic flexibility.

Political Commitment: Countries that have been able to turn population dynamics into improved human capital and faster economic growth had to show a strong political commitment, an element that is especially needed when deep cultural issues are present and influential. Moreover, the multisectoral nature of both the impact of population dynamics and the policies needed to support families to speed up the demographic transition will require strong leadership at the national level.

Such leadership can ensure that actions are implemented across different arms of government in partnership with nongovernmental actors. All of short-, medium-, and long-term efforts require a range of multisectoral efforts and bridging a substantial gap between policy design and policy implementation through (1) strengthened technical and managerial capacity of institutions, (2) broader engagement of stakeholders, and (3), most importantly, financing to meet the needs.

Short- and Medium-Term Perspectives: The policies and actions outlined in this report include short- and medium-term returns to investments that are needed quickly. Some of the policies in education and health will not pay off quickly but are nevertheless critical for the eventual speeding up of the demographic transition. Successful programs will need to balance the time perspectives and short-term returns and results to create the political space for medium- and long-term returns.

Economic Flexibility: Although this report has mainly focused on the first stage in the process of achieving a demographic dividend—namely, accelerating the demographic transition—the dividend is not automatic. As noted in Part I and highlighted in the upcoming regional report on the demographic divided in Sub-Saharan Africa, two additional issues need to be addressed if the change in the population structure is to lead to economic dividends: (1) the economy of the country needs to be able to create jobs that can take advantage of the decline in dependency ratio and the improvement in human capital, and (2) policies to encourage savings and strengthen the financial sector must be put into place to ensure that, as the youth bulge moves into the earning years, their savings can fuel further economic growth.

The World Bank can deploy a variety of instruments ranging from investment lending, knowledge services (e.g., economic and sector work, technical assistance), and capacity development grants to policy instruments such as development policy loans and poverty reduction strategy credits to support countries in furthering this agenda. Each country will need to carefully consider what tools are most appropriate for its specific objectives and within its country contexts.

APPENDIX 1: METHODOLOGY

This study used a three-part approach that considered quantitative analysis, quantitative analysis, and policy space analysis. The methodology for each analysis type is discussed here.

QUANTITATIVE ANALYSIS

This study applied a range of fertility and analysis of family formation tools, drawing on various data sources in order to understand fertility and its determinants. The aim was to analyze the known drivers of fertility change and empirically explore how Sahel countries are performing on these drivers. The analysis included: (1) analysis of trends in fertility using measures such as the total fertility rates (TFRs); socioeconomic differentials in TFR; trends in age-specific fertility rates; median ages at first sex, first marriage, and first birth; (2) desired mean numbers of children and how this ideal family size differs across socioeconomic groups; and (3) analysis of the determinants of fertility using Bongaarts model as the analytical framework to focus on the key determinants such as marriage, postpartum infecundability, abortion, contraception, and sterility. The analysis specifically addressed questions such as the relative effect of these proximate determinants on current levels of fertility as well as the relative impact of changes in the proximate determinants and how these have contributed to the observed changes (or lack of changes) in fertility.

The study used the following multivariate analyses: (1) the Poisson model on socioeconomic factors associated with lifetime fertility (children ever born) among women in union controlling for age of respondent, urban/rural, marital duration, household socioeconomic status, age at first sex, age at first marriage, religion, level of education of the wife, level of education of the partner, employment (seasonal versus all year), approval of family planning, region, and ethnicity; and (2) the logistic regression model on socioeconomic factors associated with the use of modern contraceptive use among women in union, women in union in urban areas, and women in union in rural areas controlling for age group, religion, education level, ethnic group, place of residence, duration of marriage, husband's approval of family planning, partner's education, number of living children, fertility preference, region, and wealth index.

QUALITATIVE ANALYSIS

Four countries (Burkina Faso, Côte d'Ivoire, Mali, and Niger) were selected for the qualitative inquiry to complement the quantitative research findings related to the demographic dividend in the Sahel.

Experienced local consultants led by a lead international consultant developed and finalized the interview guides and interview techniques and transcriptions. In each country, the qualitative research consultants contacted local community leaders and stakeholders to arrange the interviews and discussions with support from the local World Bank offices to arrange interviews with policy makers and government representatives as needed. In Niger, logistical difficulties meant that data collection was delayed and the majority of results were not available for the analyses presented in this paper.

Table A1 shows the total pool of focus group discussions and in-depth interviews from which individual country-level activities were chosen. Each interview or discussion was recorded and transcribed into French.

For reasons of time, not all countries carried out all interviews, but rather the activities were distributed across countries. Each researcher was assigned four focus group discussions and five in-depth interviews based on their local experience and contacts. In each country setting, one rural area and one urban neighborhood in the capital city were selected purposively. The urban neighborhoods were biased toward middle-income groups who are likely to have atypical fertility attitudes and behaviors compared with the general population. They will perhaps be the first to

benefit from the demographic dividend, and thus their case is of particular interest. For this reason, in these settings, specific focus group discussions took place with both male and female urban residents aged 20–29 (who are more likely to be educated). Other focus group discussions in both rural and urban areas differentiated between younger and older women who may be at different stages of their fertility careers. Family planning users were limited to urban woman aged 20–34, because these age groups are more likely to be users of contraceptive methods, especially for spacing. Men aged 30–59 who are likely to have female partners in the reproductive age groups were also interviewed in rural and urban areas.

Table A1: Focus Group Discussions and In-Depth Interviews

FOCUS GROUP DISCUSSIONS	IN-DEPTH INVIDIDUAL INTERVIEWS			
Urban areas	Community representatives			
 Women aged 15–29 Women aged 30–59 Men aged 30–59 Family planning users aged 20–34 Women aged 20–29 with at least secondary education Men aged 20–29 with at least secondary education 	 Community or religious leader Representative of an NGO working on population/health Representative from a savings and credit program Family planning provider Teacher or teacher trainer Entrepreneur or business leader 			
	 Representative from the Chamber of Commerce 			
 Rural areas Women aged 15–29 Women aged 30–59 Men aged 30–59 	Government representatives and policy specialists in: Health and population Youth Gender Economics and investment Education			

Informed consent was obtained orally for participation in the study, and interviewees signed a consent form that gave contact details if they required further information about the study.

In order to reduce time and study costs, participants were selected purposively through snowball sampling among naturally occurring groups such as *grins* (informal tea-drinking associations) or trading or youth associations. Although this may introduce some selectivity, the research still elicited important norms and values that are common to others outside these groups. Selection criteria (based on, for example, age and marital, educational, and employment status, among other factors) were assessed using a "facesheet," which determined the potential participant's eligibility for the study.

Key topics of focus for the qualitative inquiry included:

- 1. The role and value of children
- 2. The use of child fostering
- 3. Attitudes toward family planning
- 4. Messaging around family planning
- 5. Family planning service provision

Other topics related to the impact of population growth and the potential of a demographic dividend were also included in the focus group discussions and the key informant interviews:

- 1. Population growth and rural urban migration
- Impact of urbanization on services (health and education) and living conditions (housing, sanitary)
- 3. Impact of urbanization on crime
- 4. Overall challenges with the education sector (quality and quantity)
- 5. Reasons girls drop out of school
- 6. Impact of long distances to school, high fees
- 7. Challenges to traditional views on girl education
- 8. Youth and unemployment
- 9. Challenges in the business environment and issues around corruption
- 10. Issues around banking barriers, savings and investments.

The interviews focused on the causes and consequences of the demographic dividend primarily within the domains of fertility, education, employment, investment, and infrastructure. The wider socioeconomic consequences for economic growth and security were also discussed, and recommendations were elicited as to how to better capitalize upon the dividend. Specific attention was given to gender-related differences in relation to how the demographic dividend is (or could be) experienced. Questioning also pertained to perceptions of the barriers that young people face in maximizing their chances of prolonging their education or training, securing gainful employment, and regulating their fertility to ensure better health and well-being at individual. family, and community levels. Although qualitative work has the limitation of not ensuring a definitive representative national or regional picture, it does offer important insights into factors that influence decision making. Moreover, qualitative work allows for better understanding of how knowledge is transmitted and who the cultural or societal influencers are. Such information can help better structure policies and programs for behavior change interventions and communications. The opportunity to work on four countries allowed for the identification of repeated themes that cut across national borders, but also helped identify differences across the region.

POLICY SPACE ANALYSIS

The objective of this exercise was to identify the available "policy space" (i.e., the extent to which a country is close to, or far from, best-practice policies and investments). This exercise also, to the extent possible, looked at possible gaps between existing policies and levels of implementation.

Two related but distinct analyses were carried out:

- 1. Global review of evidence-based policies and programs that can catalyze the demographic transition
- 2. Policy mapping in the Sahel

The global review analyzed the scientific and gray literature for evidence on policies and programs that address the key factors mentioned above: family planning, age at marriage, infant and child health, and girls' education. Searches for scientific publications were performed using databases (Google Scholar, PubMed), and the gray literature was searched via Google—for example, for project reports, conference abstracts, and unpublished working papers. Bibliographies of relevant

articles, particularly review articles, were used to identify additional articles of interest. Priority was placed on information that included evidence about results, such as M&E findings or impact analyses. Special effort was made to identify evidence from the Sahel region and the study countries in particular.

For the second analysis, we used a case study approach to examine how countries in the Sahel have adopted and implemented policies around the demographic transition, particularly fertility change. The objective was to draw lessons and policy recommendations. First, a framework was developed to analyze the policy process. Policy content and design are considered as only the first stage of the policy space: to achieve significant change, policies must be designed well and must be implemented fully and successfully. Many scholars and practitioners have attempted to disentangle the complex factors involved in policy implementation. The characteristics focused on in this analysis have been distilled from two key models (Crosby 1996; Sabatier and Mazmanian 1980). For the purposes of this policy space analysis, the two models are synthesized into a single framework to identify characteristics of policy implementation for analysis in the demographic transition in the Sahel. The complete framework is displayed in Figure A1 and illustrates three stages of the policy process: (1) policy design and adoption, (2) policy translation for implementation, and (3) policy implementation, as well as the relevant domains within each. The definitions and characteristics of each of the policy implementation domains are further detailed in Table A2.

Figure A1: Three-Stage Conceptual Framework for Analyzing the Policy Space



Table A2: Conceptual Framework Developed for the Sahel Analysis

Table Az. Conceptual Framework Developed for the Safiel Arialysis					
DOMAIN	DEFINITION AND CHARACTERISTICS				
Financial resources					
Resource allocation	Setting aside of sufficient financial, human, technical resources—both the initial				
	investment and ensuring a place in the government budget allocation process				
Resource mobilization	A set of action statements about how, when, where, and by whom resources are to				
	be utilized				
Expanding resources and	As programs and projects grow over time, to what extent do resources likewise				
support	expand				
	Stakeholder support				
Legitimization	Emergence of a policy champion and advancement of the policy as a legitimate				
	function (i.e., the policy represents recommended behavior and is considered				
	valid)				
Proactive leadership	High-level politicians, bureaucrats, technical experts, and sectoral managers				
	engage in forward-looking and comprehensive policy making				
Constituency building	Reform must build a constituency—that is, positive stakeholders who will				
	support the above-stated champion; building a constituency consists of gaining				
	acceptance and winning new sets of beneficiaries				
	Institution building and strengthening				
Organizational	Internal tasks and processes (new units and departments may be needed);				
design/structure	attention to external environment and stakeholders (to secure resources and avoid				
	turf wars); communication with other agencies (to ensure that enabling				
	regulations and subpolicies are formulated)				
Capacity building for	Ways to increase technical and human resource capacity to implement programs				
implementers	and projects				
Collaboration across	Extent to which groups work together to achieve policy aims				
organizations and groups					
Monitoring for results					
Monitoring results	What effect is the policy having: progress on processes, outcomes, impacts				
Feedback/ adaptation	Policies and programs are responsive to local context and to past performance				
mechanisms	and have sufficient flexibility to adapt and meet ongoing needs				

Next, a survey instrument was developed to operationalize these domains. Questions reflected each domain, and response types included categorical options, response scales (for example, "on a scale of 1–10"), and open-ended questions. This instrument first asked about multisectoral population policies and then about policies specific to relevant ministries (health, education, gender, youth, etc.).

Finally, the survey instrument was administered in Burkina Faso, Côte d'Ivoire, Mali, and Niger. The questions were asked separately of representatives from different sectors, as applicable. A total of 13 questionnaires were completed (Table A3), and the data were analyzed according to the three-stage conceptual framework described above, with particular attention to the domains in Table A2. The primary unit of analysis was the country: were there commonalities across policies and sectors in the policy process (from design through translation and implementation), and what were key areas of divergence? Regional themes also emerged from the analysis.

Table A3. Sectors Included in the Study Sample

COUNTRY	SECTORS INCLUDED		
Burkina Faso	Multisectoral population policy		
	2. Health		
	3. Education		
Côte d'Ivoire	Multisectoral population policy		
	5. Health		
	6. Youth		
Mali	7. Multisectoral population policy		
	8. Health		
	9. Education		
	10. Gender		
Niger	11. Multisectoral population policy		
	12. Health		
	13. Education		

62

REFERENCES

- Aghajanian, A., and A. H. Merhyar. 1999. "Fertility, Contraceptive Use and Family Planning Program Activity in the Islamic Republic of Iran." *International Family Planning Perspectives* 25 (2): 98–102.
- Ainsworth, M. 1992. "Economic Aspects of Child Fostering in Côte d'Ivoire." Living Standards Measurement Study Working Paper No, 92. Washington, DC, World Bank.
- Akresh, R., D. De Walque, and H. Kazianga. 2013a. Alternative Cash Transfer Delivery Mechanisms: Impacts on Routine Preventative Health Clinic Visits in Burkina Faso. Washington DC: World Bank.
- ——. 2013b. Cash Transfers and Child Schooling: Evidence from a Randomized Evaluation of the Role pf Conditionality. Washington, DC: World Bank.
- Ampofo, D. A., D. D. Nicholas, S. Ofosu-Amaah, S. Blumenfeld, and A. K. Neumann. 1976. "The Danfa Family Planning Program in Rural Ghana." *Studies in Family Planning* 7 (10): 266–74.
- Angeles, L. 2010. "Demographic Transitions: Analyzing the Effects of Mortality on Fertility." Journal of Population Economics 23 (1): 99–120.
- Baird, S., E. Chirwa, C. McIntosh, and B. Özler. 2010. "The Short-Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women." *Health Economics* 19 (S1): 55–68.
- Barber, S. L. 2007. "Family Planning Advice and Postpartum Contraceptive Use among Low-Income Women in Mexico." *International Family Planning Perspectives* 33 (1): 6–12.
- Bolam, A., D. S. Manandhar, P. Shrestha, M. Ellis, and A. M. d. L. Costello. 1998. "The Effects of Postnatal Health Education for Mothers on Infant Care and Family Planning Practices in Nepal: A Randomised Controlled Trial." *BMJ* 316 (7134): 805–11.
- Bongaarts, J. 1978. "A Framework for Analyzing the Proximate Determinants of Fertility." Population and Development Review 4 (1): 105–32.
- Bongaarts, J., J. Cleland, J. W. Townsend, J. T. Bertrand, and M. Das Gupta. 2012. *Family Planning Programs for the 21st Century: Rationale and Design.* New York, NY: Population Council.
- Breierova, L. and E. Duflo. 2004. The Impact of Education on Fertility and Child Mortality: Do Fathers Really Matter Less Than Mothers? Cambridge, MA: NBER.
- Cammack, M., L. A. Young, and T. Heaton. 1996. "Legislating Social Change in an Islamic Society: Indonesia's Marriage Law." *The American Journal of Comparative Law* 44 (1): 45–73.
- Canning, Raja, and Yazbeck. Forthcoming. Regional report on the demographic divided in Sub-Saharan Africa.
- Castle, S. 1995. "Child Fostering and Children's Nutritional Outcomes in Rural Mali: The Role of Female Status in Directing Child Transfers." Social Science and Medicine 40 (5): 679–93.
- Chicoine, L. 2012. *Education and Fertility: Evidence from a Policy Change in Kenya*. Bonn, Germany: IZA.
- Crosby, B. L. 1996. "Policy Implementation: The Organizational Challenge." *World Development* 24: 1403–15.
- Darney, B. G., M. R. Weaver, S. G. Sosa-Rubi, D. Walker, E. Servan-Mori, S. Prager, et al. 2013. "The Oportunidades Conditional Cash Transfer Program: Effects on Pregnancy and

- Contraceptive Use Among Young Rural Women in Mexico." *Int Perspect Sex Reprod Health* 39 (4): 205–14. doi: 210.1363/3920513.
- Das Gupta, S., S. Mukherjee, S. Singh, R. Pande, and S. Basu. 2008. *Knot Ready: Lessons from India on Delaying Child Marriage for Girls*. Washington, DC: International Center for Research on Women.
- Debpuur, C., J. F. Phillips, E. F. Jackson, A. Nazzar, P. Ngom, and F. N. Binka. 2002. "The Impact of the Navrongo Project on Contraceptive Knowledge and Use, Reproductive Preferences, and Fertility." *Studies in Family Planning* 33 (2): 141–64.
- Diop, N. J., M. M. Faye, A. Moreau, J. Cabral, H. Benga, F. Cissé, B. Mané, I. Baumgarten, and M. Melching. 2004. *The TOSTAN Program. Evaluation of a Community Based Education Program in Senegal.* New York, NY: Population Council.
- Duflo, E., P. Dupas, and M. Kremer. 2011. Education, HIV and Early Fertility: Experimental Evidence from Kenya. UCLA manuscript. http://economics.mit.edu/files/6951
- Edmeades, J., R. Hayes, and G. Gaynair. 2014. *Improving the Lives of Married Adolescent Girls in Amhara, Ethiopia: A Summary of the Evidence*. Washington, DC: International Center for Research on Women.
- Engebretsen, S. 2013. Designing, Implementing, and Evaluating a Targeted, Evidence-Based Intervention for a Vulnerable Subgroup of Girls: A Case Study of the Filles Éveillées (Girls Awakened) Pilot Program for Migrant Adolescent Girls in Domestic Service in Urban Burkina Faso. New York: Population Council.
- Engebretsen, S. and G. Kabore. 2011. Addressing the Needs of Girls at Risk of Early Marriage and Married Adolescent Girls in Burkina Faso. New York: Population Council.
- Erulkar, A. S. and Muthengi, E. 2009. "Evaluation of Berhane Hewan: A Program to Delay Child Marriage in Rural Ethiopia." *International Perspectives on Sexual and Reproductive Health* 35 (1): 6–14.
- Fares, J., V. Gauri, E. Y. Jimenez, M. K. A. Lundberg, D. McKenzie, M. Murthi, et al. 2006. *World Development Report 2007: Development and the Next Generation*. Washington, DC: World Bank.
- Farooq, G. M. and L. A. Adeokun. 1976. "Impact of a Rural Family Planning Program in Ishan, Nigeria, 1969–72." *Studies in Family Planning* 7 (6): 158–69.
- Farr, A. C., K. Witte, K. Jarato, and T. Menard. 2005. "The Effectiveness of Media Use in Health Education: Evaluation of an HIV/AIDS Radio Campaign in Ethiopia." *Journal of Health Communication* 10 (3): 225–35.
- Field, E., N. Ashraf, and J. Lee. 2010. Household Bargaining and Excess Fertility: An Experimental Study in Zambia. http://scholar.harvard.edu/field/publications/household-bargaining-and-excess-fertility-experimental-study-zambia
- Freij, L. S. 2010. "Safe Age of Marriage" in Yemen: Fostering Change in Social Norms. Washington, DC: Pathfinder International.
- Gardner, R. and S. Reynolds. 2012. Brazil's Bolsa Familia: Can a Conditional Cash Transfer Reduce Teen Fertility. http://paa2012.princeton.edu/papers/121121
- Gribble, J. and M.-L. Voss. 2009. Family Planning and Economic Well-Being: New Evidence from Bangladesh. Washington, DC: Population Reference Bureau.
- Ha, B. T. T., R. Jayasuriya, and N. Owen. 2005. "Increasing Male Involvement in Family Planning Decision Making: Trial of a Social-Cognitive Intervention in Rural Vietnam." *Health Education Research* 20 (5): 548–56.
- Health Policy Project. 2011. Spreading the Light for Healthy Families. Retrieved January 10, 2014. http://www.healthpolicyproject.com/index.cfm?id=ImamFousseyni

- Health Policy Project. 2013a. Repositioning Family Planning in Burkina Faso: Status of Family Planning Programs in Burkina Faso (Brief). Washington, DC: Health Policy Project.
- ——. 2013b. Repositioning Family Planning in Niger: Status of Family Planning Programs in Niger (Brief). Washington, DC: Health Policy Project.
- Hill, K., M. Mahy, and T.K. Legrand. 2001. "Mortality, Fertility, and Reproductive Behavior in Senegal and Zimbabwe." Paper presented at the International Population Conference of the International Union for the Scientific Study of Population, Salvador, Brazil, August 18–24.
- Hossain, M. B., J. F. Phillips, and T. K. Legrand. 2007. "The Impact of Childhood Mortality on Fertility in Six Rural Thanas of Bangladesh." *Demography* 44 (4): 771–84.
- Jones, N., C. Harper, and C. Watson. 2010. Stemming Girls' Chronic Poverty: Catalysing Development Change by Building Just Social Institutions. Northhampton, UK: Chronic Poverty Research Centre.
- Kane, T. T., M. Gueye, I. Speizer, S. Pacque-Margolis, and D. Baron. 1998. "The Impact of a Family Planning Multimedia Campaign in Bamako, Mali." *Studies in Family Planning* 29 (3): 309–23.
- Katz, K. R., C. G. West, F. Doumbia, and F. Kane. 1998. "Increasing Access to Family Planning Services in Rural Mali Through Community-Based Distribution." *International Family Planning Perspectives* 24 (3): 104–10.
- Kearney, M. S. and P. B. Levine. 2009. "Subsidized Contraception, Fertility, and Sexual Behavior." Review of Economics and Statistics 91 (1): 137–51.
- Ketende, C., N. Gupta, and R. Bessinger. 2003. "Facility-Level Reproductive Health Interventions and Contraceptive Use in Uganda." *International Family Planning Perspectives* 29 (3): 130–37.
- KFW-Entwicklungsbank. 2006. Côte d'Ivoire: Family Planning and HIV Prevention Ex-Post Evaluation Report. KFW-Entwicklungsbank.
- Kim, Y. M., A. Kols, A. Martin, D. Silva, W. Rinehart, S. Prammawat, et al. 2005. "Promoting Informed Choice: Evaluating a Decision-Making Tool for Family Planning Clients and Providers in Mexico." *International Family Planning Perspectives* 31 (4): 162–71.
- Kincaid, D. L. 2000. "Social Networks, Ideation, and Contraceptive Behavior in Bangladesh: A Longitudinal Analysis." *Social Science and Medicine* 50 (2): 215–31.
- Koenig, M. A., J. F. Phillips, R. S. Simmons, and M. A. Khan. 1987. "Trends in Family Size Preferences and Contraceptive Use in Matlab, Bangladesh." *Studies in Family Planning* 18 (3): 117–27.
- Lee, R. D. 2000. Intergenerational Transfers and the Economic Life Cycle: A Cross-Cultural Perspective. 2000: 17-56.
- Lee, R. D. and K. L. Kramer. 2002. "Children's Economic Roles in the Maya Family Life Cycle: Cain, Caldwell, and Chayanov Revisited." Population and Development Review 28: 475–99.
- LeGrand, T. K. and J. Sandberg. 2006. "Effects of Child Mortality on Fertility: Theoretical Complexities and Measurement Difficulties." In *Entre natue et culture: quelle(s) demographie(s)? Chaire Quetelet 2002*, eds. Loriaux M. and E. Vilquin. Louvain-la-Neuve, Belgium: Academia-Bruylant.
- Levy, D., M. Sloan, L. Linden, and H. Kazianga. 2009. *Impact Evaluation of Burkina Faso's BRIGHT Program*. Washington, DC: Mathematica Policy Research, Inc.

- Luck, M., E. Jarju, M. D. Nell, and M. O. George. 2000. "Mobilizing Demand for Contraception in Rural Gambia." *Studies in Family Planning* 31 (4): 325–35.
- Malhotra, A., A. Warner, A. McGonagle, and S. Lee-Rife. 2011. Solutions to end child marriage: What the evidence shows. Washington, DC: International Center for Research on Women.
- McCrary, J. and H. Royer. 2006. The Effect of Female Education on Fertility and Infant Health: Evidence from School Entry Policies Using Exact Date of Birth. Cambridge, MA: NBER.
- Meuwissen, L. E., A. C. Gorter, and A. J. A. Knottnerus. 2006. "Impact of Accessible Sexual and Reproductive Health Care on Poor and Underserved Adolescents in Managua, Nicaragua: A Quasi-Experimental Intervention Study." *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine* 38 (1): 56.e51–56.e59.
- Molyneaux, J. W. and P. J. Gertler. 2000. "The Impact of Targeted Family Planning Programs in Indonesia." *Population and Development Review* 26: 61–85.
- Montgomery, M. R. and B. Cohen. 1998. "Introduction." In: *From Death to Birth: Mortality Decline and Reproductive Change*, eds. M. R. Montgomery and B. Cohen. Washington, D.C.: National Academy Press.
- Nag, M. 1992. Family Planning Success Stories in Bangladesh and India, Volume 1. Washington, DC: World Bank.
- Osili, U. O. and B. T. Long. 2007. "Does Female Schooling Reduce Fertility? Evidence from Nigeria." National Bureau of Economic Research Working Paper No. 13070, Cambridge, MA. NBER.
- Pitt, M. M., M. R. Rosenzweig, and D. M. Gibbons. 1993. "The Determinants and Consequences of the Placement of Government Programs in Indonesia." *The World Bank Economic Review* 7 (3): 319–48.
- Population Services International. 2012. *ProFam Urban Outreach: A High Impact Model for Family Planning*. Washington, DC: PSI.
- Pradhan, E. and D. Canning. 2013. "The Effect of Education on Teenage Fertility: Evidence from the Abolition of School Fees in Ethiopia." Paper presented at the 7th Annual POPPOV Conference, Oslo Norway, January 23–26.
- Preston, S.1978. The Effects of Infant and Child Mortality on Fertility. New York: Academic Press.
- Rawlings, L. B. and G. M. Rubio. 2005. "Evaluating the Impact of Conditional Cash Transfer Programs." *The World Bank Research Observer* 20 (1): 29–55.
- Rogers, E. M., P. W. Vaughan, R. M. Swalehe, N. Rao, P. Svenkerud, and S. Sood. 1999. "Effects of an Entertainment-Education Radio Soap Opera on Family Planning Behavior in Tanzania." *Studies in Family Planning* 30 (3): 193–211.
- Sabatier P. and D. Mazmanian. 1980. "The Implementation of Public Policy: A Framework of Analysis." *Policy Studies Journal* 8: 538–60.
- Schultz, T. P. 1997. "Demand for Children in Low Income Countries." In: *Handbook of Population and Family Economics*, ed. M. R. Rosenzweig and O. Stark. Amsterdam: North-Holland.
- Selim, M., N. Abdel-Tawab, K. Elsayed, A. E. Badawy, and H. E. Kalaawy. 2013. *The Ishraq Program for Out-of-School Girls: From Pilot to Scale-Up. Final Report.* Cairo, Egypt: Population Council.
- Taylor, C., J. Newman, and N. Kelly. 1976. "The Child Survival Hypothesis." *Population Studies* 30 (2).
- Terefe, A. and C. P. Larson. 1993. "Modern Contraception Use in Ethiopia: Does Involving Husbands Make a Difference?" *American Journal of Public Health* 83 (11): 1567–71.

- United Nations Department of Economic and Social Affairs, Population Division. 2011. *World Population Prospects: The 2010 Revision.* New York: UN Population Division.
- Valente, T. W., Y. M. Kim, C. Lettenmaier, W. Glass, and Y. Dibba. 1994."Radio Promotion of Family Planning in The Gambia." *International Family Planning Perspectives* 20 (3): 96–100.
- Warwick, D. P. 1986. "The Indonesian Family Planning Program: Government Influence and Client Choice." *Population and Development Review* 12 (3): 453–90.
- World Bank. 2003. *Project Performance Assessment Report: Bangladesh Female Secondary School Assistance Project*. Washington, DC: World Bank.
- ——. 2013. "Niger Invests in Early Childhood through Social Safety Nets." World Bank News, November 5. http://www.worldbank.org/en/news/feature/2013/11/05/niger-invests-in-early-childhood-through-social-safety-nets

The demographic transition in the Sahel region has been slower than that in the rest of the world. Although child mortality rates have declined in recent decades, they are still higher in West Africa than in other regions. Furthermore, the fertility decline has progressed very slowly, with some countries seeing stalls and others even an increase in birth rates. The speed with which this transition takes place has a critical impact on a population's age structure and future potential for economic productivity.

The current rates of change in the Sahelian subregion will make it unlikely that countries will achieve an age structure that will create a youth bulge of a healthy, well-nourished, and educated cohort ready to enter a modern labor market to capture a sizable demographic dividend. Once missed, this opportunity for a demographic dividend will not return. This analysis uses quantitative data triangulated with the qualitative findings and policy analyses to identify the triggers necessary to accelerate the demographic dividend in this subregion.

ABOUT THIS SERIES:

This series is produced by the Health, Nutrition, and Population Global Practice of the World Bank. The papers in this series aim to provide a vehicle for publishing preliminary results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character. For free copies of papers in this series please contact the individual author/s whose name appears on the paper. Enquiries about the series and submissions should be made directly to the Editor Martin Lutalo (mlutalo@ worldbank.org) or HNP Advisory Service (healthpop@worldbank.org, tel 202 473-2256).

For more information, see also www.worldbank.org/hnppublications.



1818 H Street, NW Washington, DC USA 20433

Telephone: 202 473 1000
Facsimile: 202 477 6391
Internet: www.worldbank.org
E-mail: feedback@worldbank.org