

# THE EFFECTS OF A VERY YOUNG AGE STRUCTURE IN YEMEN COUNTRY CASE STUDY

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THE SHAPE OF THINGS TO COME SERIES

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## Introduction

In recent years, Yemen broke into the global political scene, as periodic terrorist attacks against foreign targets and its location as a base for al-Qaida in the Arabian Peninsula have highlighted the geopolitical significance of this desert country. Analysis of these incidents frequently noted Yemen's weak and autocratic central government, ongoing rebellion and civil strife, poverty and unemployment, and growing natural resource shortages, all of which have been linked to the hospitable environment for militancy and terrorism.

Another factor has often been neglected or only briefly addressed in discussions of Yemen's political instability: its rapidly growing population and very young age structure. In 2005, Yemen was home to 21 million people, nearly triple its 1980 population of 8.4 million (Table 1). Driven by a very high fertility rate of six children per woman, Yemen's population is currently growing at three percent annually, a pace that would lead it to double in fewer than 25 years. With three-quarters of its population under the age of 30 and 46 percent under age 15, Yemen has the most youthful age structure in the world outside of sub-Saharan Africa.<sup>1</sup> By contrast, 42 percent of the population of the United States is under age 30.

Yemen's ongoing population growth is occurring in a context of many other challenges. Per capita income is less than \$900 a year, nearly half of the population lives in poverty, and although there are conflicting figures, by some estimates, more than one-third of adults in Yemen are unemployed.<sup>2</sup> Although the most recent elections were judged by observers to be fair, much of the country is under tribal rule and out of the reach of the government, whose limited capacity to enforce laws has turned Yemen into a refuge for extremists. Worsening natural resource shortages, particularly water scarcity, demonstrate some of the most obvious current implications of Yemen's population growth, with the country already dedicating tremendous funding to desalination plants.<sup>3</sup>

In 2007, Population Action International (PAI) published *The Shape of Things to Come: Why Age Structure Matters to a Safer, More Equitable World*. In a 30-year historical analysis, the report found that countries with very young and youthful age structures—those in which 60 percent or more of the population is younger than age 30—are the most likely to face outbreaks of civil conflict and autocratic governance.<sup>4</sup> While the relationship between age structure and instability is not one of simple cause and effect, demographics can play an important role in mitigating or exacerbating a country's prospects for development and the well-being of its people. *The Shape of Things to Come* makes the case that because of this interplay of factors, demographic issues and the policies and programs that influence them—namely, family planning and reproductive health, education and economic outlets for women, and opportunities for growing cohorts of young people—must be fully integrated into development strategies by country governments and international partners.

Following the publication of *The Shape of Things to Come*, PAI is publishing three detailed case studies of Haiti, Uganda and Yemen, to further examine the relationship between demographics and development in countries and regions with very young and youthful age structures. These countries were selected because they have the youngest age structures in their respective regions (Caribbean, sub-Saharan Africa and Middle East). In addition, they clearly illustrate the challenges of individual welfare and national development faced by nations at the beginning of the demographic transition,<sup>5</sup> as well as the opportunities that lie ahead if governments and their partners implement comprehensive and forward-looking policies to shape demographic trends. The political and programmatic responses of Yemen and the other countries profiled in this series provide a diverse array of examples of policies that directly and indirectly affect age structure.

## Acknowledgements

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**Table 1**  
**Demographic and Socioeconomic Indicators for Yemen**

Population*	1980	8.4 million
	2005	21.0 million
	2025 ( <i>medium fertility scenario</i> )	35.5 million
	2025 ( <i>constant fertility scenario</i> )	39.3 million
	2050 ( <i>medium fertility scenario</i> )	53.7 million
	2050 ( <i>constant fertility scenario</i> )	87.5 million
Median population age*	2005	17 years
Population under age 15*	2005	46.0 percent
Life expectancy at birth*	2000-2005	
	<i>Female</i>	62 years
	<i>Male</i>	59 years
Net migration rate*	2000-2005	-1.0 per 1,000 population
Total fertility rate†	2003	
	<i>National</i>	6.2 children
	<i>Urban</i>	4.5 children
	<i>Rural</i>	6.7 children
Contraceptive prevalence rate (modern methods, married women ages 15 to 49)†	2003	13.4 percent
Unmet need for family planning (married women ages 15 to 49)†	2003	51 percent
HIV prevalence rate (ages 15 to 49)‡	2007	No data
Maternal mortality ratio (deaths per 100,000 live births)§	2005	430
Gross national income (GNI) per capita (Atlas method, current US\$)**	2007	\$870
Population living under two U.S. dollars/day**	2005	47.0 percent
Unemployment rate**	2006	16.5 percent
Adult literacy rate (population age 15 and over)††	1997-2007	
	<i>Female</i>	40.5 percent
	<i>Male</i>	77.0 percent
Arable land per capita (hectares)‡‡	2007	0.1

Sources:

\* United Nations Population Division 2009

† Pan Arab Project for Family Health

‡ Joint United Nations Programme on HIV/AIDS 2008

§ World Health Organization, UNICEF, UNFPA and World Bank 2007

\*\* World Bank, World Development Indicators

†† United Nations Development Programme, 2009 Human Development Report

‡‡ Food and Agriculture Organization of the United Nations, FAO Statistical Yearbook 2009

## Methodology

This study addresses the following key questions:

- How has population age structure affected development in Yemen?
- What are the demographic forces shaping Yemen's current and projected age structures?
- In what ways are the government and other stakeholders implementing policies and programs that address the country's demography? What are stakeholders' assessments of the future direction of this policy agenda?
- Considering Yemen's opportunities and challenges related to age structure issues, what policy recommendations can be offered?

In a context of very high fertility, as exists in these three countries, demographic trends are relatively easy to forecast, but the effects of rapid population growth on other sectors are less often considered. The objective of these reports is to promote the inclusion of population in broader development policies, including those related to security, good governance, economics, gender equity and the country's ability to adapt to future stresses, such as climate change. Demographic momentum is a powerful driver of future trends, but age structure is far from static. Government policies and development practices can have a major impact on the forces contributing to a more balanced age structure.

Data for the study were collected in 2008 and 2009 through a review of available statistics, policy and programmatic documents and published articles and assessments. The information collected in this desk review was supplemented by interviews with a small number of stakeholders with experience working on population issues from various levels in Yemen (see the appendices for further information).<sup>6</sup>

This report begins by briefly describing Yemen's current and projected population age structure before surveying security, governance, economic development, climate change, and gender, and assesses how these focus issues might be affected by demography. The report then outlines key demographic trends, such as age at marriage, desired family size and contraceptive use. Data from recent surveys conducted in Yemen provide insight into the attitudes of women and young people on these issues. To evaluate the response of Yemen's government and other actors to demographic issues, national policies on population and reproductive health are analyzed, and the activities of nongovernmental organizations (NGOs) and international donors in the population sector are summarized. The report concludes with a review of the opportunities and challenges facing Yemen related to age structure, and offers related policy recommendations.

**Figure 1.**  
**Age Structures along the Demographic Transition, 2005**

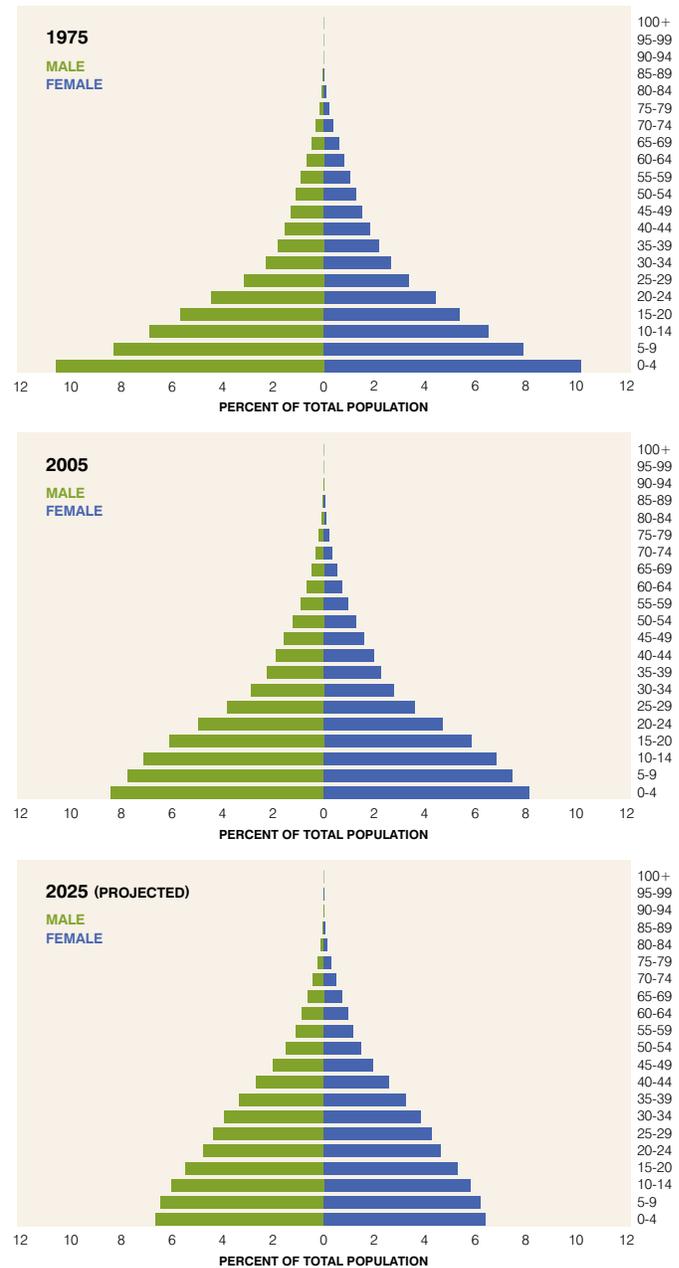


## Age Structure

In 1975, Yemen had the highest fertility rate—8.7 children per woman—and the youngest age structure in the world, with nearly 77 percent of its population younger than the age of 30. By 2005, while Uganda’s age structure was younger, Yemen was still the second-youngest country overall, with 75 percent of its population younger than age 30. Yemen’s 2005 population of 21 million has doubled in less than 20 years. Even under the assumptions of rapid and steady decline in fertility rates used in United Nations (UN) projections, Yemen’s population will double again in less than three decades. These trends indicate that Yemen is among the countries of the world in the earliest stages of the demographic transition—the gradual shift from high birth and death rates to higher life expectancy and smaller families. Yemen’s fertility rate has dropped by 2.8 children per woman in the past 20 years, but remains very high at six children per woman, guaranteeing future population growth for the long term. The implications of this growth for infrastructure, education, health care and employment are daunting: Yemen would require 500,000 new teachers and 16,000 new doctors by 2050 just to maintain the status quo.<sup>7</sup>

The UN projects a range of future demographic trajectories for Yemen based on scenarios that include various changes in fertility. Under the medium-fertility variant, which tends to be the most commonly cited of the UN scenarios, Yemen’s total fertility rate would decline to 3.6 children per woman by 2025. This would require that the pace of fertility decline to be significantly faster relative to the historical levels over the past three decades. If the medium-fertility projection is fulfilled, Yemen would have a youthful age structure in 2025, with two-thirds of its population younger than age 30, but would be experiencing significant progress toward the middle of the demographic transition.

**Figure 2**  
Yemen’s Age Structures<sup>8</sup>



## Age Structure's Impact on Development in Yemen

*The Shape of Things to Come* found that the influence of age structure on a state's security, democracy and development is significant and quantifiable. Countries with very young age structures, like Yemen, are much more likely to have experienced outbreaks of civil conflict from the 1970s through the current decade. Between 1970 and 2007, 80 percent of all new civil conflicts occurred in countries in which 60 percent or more of the population was younger than age 30. Countries at the beginning of the demographic transition, like Yemen, have also historically had a nearly 90 percent probability of autocratic or only partially democratic governance. The likelihood of democratic governance increases markedly as countries progress through the four age structure types marking the demographic transition. Although demographic factors alone are unlikely to directly cause conflict or autocracy, countries with very young age structures face greater difficulties in improving the welfare of their people and solving political and economic problems.

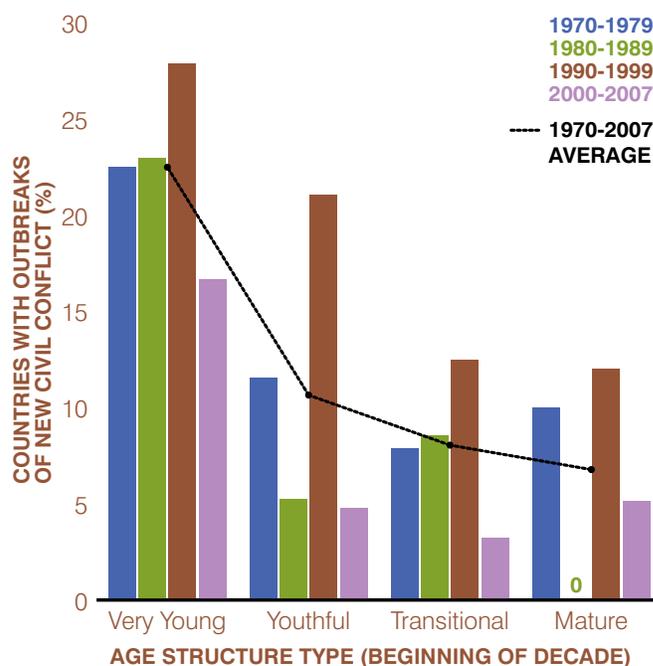
In a 2006 assessment of the country's progress toward meeting the Millennium Development Goals, the UN noted that "high population growth remains an underlying cause of many of the problems Yemen faces," adding that, "Less than full attention to the population dynamics in the country, and in particular efforts to increase birth spacing and decrease the total fertility rate... will undermine socioeconomic development efforts."<sup>9</sup>

### Security

The country that is now Yemen experienced more than 20 years as two separate states with very different approaches to governance. In the north, the Yemen Arab Republic followed the capitalist model, with socially conservative leadership, including the country's current president. In the south, the People's Democratic Republic of Yemen operated under a socialist economy and was much poorer, but had better indicators of health, education and gender equality than its neighbor.<sup>10</sup> In 1990, the two countries unified into a single Yemen. Initially, the unification did not proceed smoothly, and a civil war erupted briefly in 1994.

In recent years, Yemen's security situation has only worsened. A review of articles on Yemen by scholars and other experts points to growing concern that Yemen's stability has reached a "tipping point," and demographic issues are widely cited as a contributing factor to the country's fragility. "Inadequate

**Figure 3**  
Risk of Civil Conflict by Age Structure Type, 1970-2007<sup>11</sup>



economic development and a concomitant decline in living standards are causing civil unrest, fueling regional rebellion, and slowly dragging the country toward collapse," one observer concludes.<sup>12</sup> Although the terrorist attack against the U. S. Embassy in 2008 and the attempted airline bombing in 2009 for which Yemen was a likely training site may have received the most external attention, there are two other major internal conflicts underway. Apart from the activities of al-Qaida in the Arabian Peninsula, Yemen faces both secessionist struggles in the south and a civil war with rebels in the north that has spilled into Saudi Arabia and generated growing humanitarian repercussions.

Seen from one perspective, the government, with aid from the United States, has conducted high-profile campaigns against terrorism. In an essay in *Foreign Affairs*, Yemeni President Ali Abdullah Saleh emphasized the government's preventive approach, including confiscation and prohibition of firearms and efforts by religious leaders to "enlighten youths who have been misled...integrating them back into society by convincing them to abandon extremist ideas and return to the righteous path."<sup>13</sup> However, divisions between political elites and presumed

terrorists are not always clear, and so far, the Saleh government's approach has yielded little success. The government's refusal to extradite one of the leaders of the *USS Cole* bombing to the United States contributed to a suspension of the \$20.6 million aid package slated for disbursement to Yemen through the Millennium Challenge Corporation,<sup>14</sup> and the rehabilitation program for extremists has been derided as a failure.

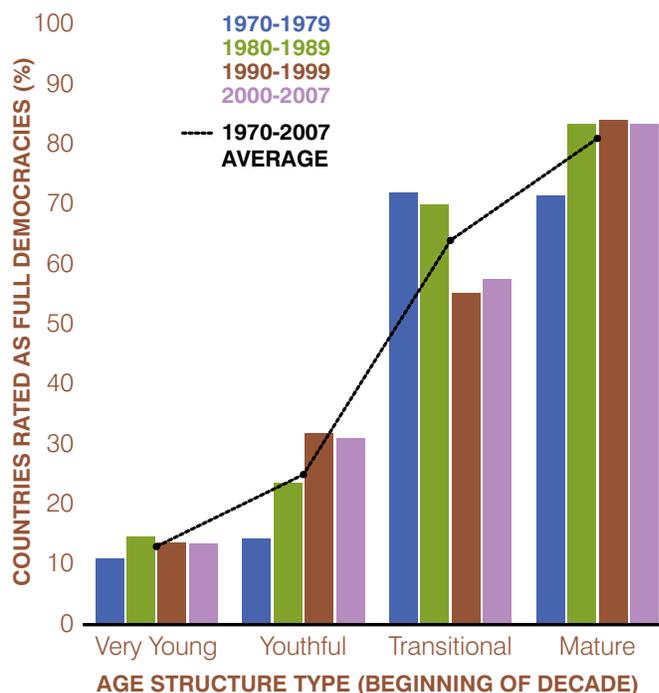
In Yemen, one example of the relationship between the country's very young age structure and its stability is the high unemployment rate among youth. According to one stakeholder, "this creates a large group of poorly educated and bored young men, which poses a security threat to the government and the established society."<sup>15</sup> Another stakeholder reports that there is "still need for education, but at the same time, jobs aren't available."<sup>16</sup> Flavia Pansieri, the former resident representative of the United Nations Development Programme in Yemen, has noted the relationship between opportunities for young people and security, describing "a very strong linkage between a failure of development' and the security threats that 'hopelessness can create.'" The threat does not come only from poverty: "What seems to be a real trigger for terrorism and extremism is when there is a sense of alienation and marginalization."<sup>17</sup>

### Governance

Even before the most recent civil strife and terrorist activity, some observers have considered Yemen to be on the brink of becoming a failed state in the near future.<sup>18</sup> A Brookings Institution study ranks Yemen 30th among the 141 weakest states in the developing world.<sup>19</sup> Yemen is rated as a mixed authority state, or "anocracy," (based on measures of political participation and executive power) by the Center for Systemic Peace.<sup>20</sup> It is rated as "partly free" (based on measures of civil liberties and political rights) by Freedom House. Yemen also ranks in the bottom fifth of all countries in The World Bank's evaluation of accountability, government effectiveness, political stability and the rule of law.<sup>21</sup>

Although Yemen has held a series of votes since its first direct presidential election in 1999, President Saleh has faced few political challenges to his 30-year hold on power, beginning as president of North Yemen in 1978 and then as president of Yemen since its reunification. The ruling party, the General People's Congress (GPC), "has become virtually synonymous with the state."<sup>22</sup> While operating as a technical democracy, the government maintains a strong centralist orientation, carefully restricting opposition to a finite and regulated degree of political space. Political leaders consider a heavy hand as a necessary

**Figure 4**  
Likelihood of Democratic Governance by Age Structure Type, 1970-2007<sup>23</sup>



tool to maintain national unity and stability in the face of Islamists, who form the most potent wing of a rather splintered opposition to the GPC. According to one report, "The Yemeni regime has very consciously framed its policies in the language of democracy, while simultaneously muzzling initiatives" that could strengthen its implementation.<sup>24</sup> The government's reach is also limited by the strength of tribal authorities, "a state within a state," whose long-standing preference to maintain their autonomy is reinforced by the perception of a weak and corrupt government.<sup>25</sup>

The limited capacity of the government to provide for its own citizens is even weaker for the constant stream of refugees fleeing from Ethiopia and Somalia to Yemen by boat. In 2006, nearly 26,000 Somalis and 12,000 Ethiopians were officially registered as arriving refugees in Yemen, while at least another 660 people died or were reported missing in the crossing.<sup>26</sup> Somali refugees are offered asylum in Yemen, but often are only able to find menial jobs as day laborers or domestic workers.

## Economic Development

For the first several years after the unification of North and South Yemen in 1990, Yemen's gross domestic product (GDP) grew at a rate high enough to outpace population growth, and the economy seemed to be stabilizing. However, in this decade, economic growth has been stagnant and unemployment is rising; it was estimated at 35 percent in 2003.<sup>27</sup> Most of Yemen's oil reserves—relied upon for 70 percent of government revenue—have been extracted and could be depleted entirely in less than a decade.<sup>28</sup> External foreign assistance has been waning, with the Development Assistance Committee cutting its aid to Yemen by one-third between 2006 and 2008. Private investment, both from the Gulf region and globally, has also declined, as potential investors shy away from the corruption prevalent in Yemen.<sup>29</sup> Problems of inequitable access to economic resources particularly affect women, young people and those living in rural areas.<sup>30</sup>

Another hindrance to Yemen's economic development is social addiction to qat, a plant with stimulant properties that has been linked to increased poverty and malnutrition due to the financial costs of maintaining the habit. In addition, increases in the agricultural production of qat utilize land and water resources that could be devoted to more useful crops.<sup>31</sup>

Analyses of the relationship between population growth and economic growth have sometimes overlooked the importance of age structure.<sup>32</sup> Yet, each age group has different economic impacts, and when one age group is proportionally overrepresented in a country, it has specific effects on the country's economy. From an economic and human perspective, the large number of young people in Yemen's population is potentially a tremendous asset, as they will shape the country's future. However, with fertility rates at their current high levels, the

economy will have to sustain continuous expansion in order to keep pace with and provide sufficient jobs for the rapidly growing population. If fertility rates begin to decline and Yemen moves through the demographic transition, the country may have an opportunity to reap the benefits of the "demographic dividend," when an age structure dominated by a large segment of working-age adults provides a window of opportunity for increased economic wellbeing at the national and household levels.

The potential benefits of the demographic dividend are not automatic. In addition to the changes in age structure that must be preceded by a decline in fertility rates—which so far is not happening in Yemen—the economy must also be supported by an educated workforce and secure financial institutions.<sup>33</sup> Given Yemen's current age structure, where youth represent three-quarters of the population, and the future potential offered by continued progress through the demographic transition, there must be a strong focus on human capital, with intensive investments in education and health. Poorly educated young people will not contribute to their country's economic development in a way that will enable it to compete with other economies.

## Climate Change

Countries with a youthful and growing population are overwhelmingly likely to be among those considered most vulnerable to climate change, and Yemen is no exception. On average, 59 percent of countries with a very young age structure are also among the least resilient to the impacts of global climate change, both in terms of sensitivity and adaptability. Based on its economic and environmental situation and human and civic resources, including age structure, Yemen's capacity to adapt is rated among the lowest in the world, meaning the country particularly lacks the "positive means to cope and adapt in the face of climate change."<sup>34</sup>

Because the majority of the population relies on agriculture for income and the country is already limited by a small area of arable land, the potential negative consequences of climate change will be magnified in Yemen. According to a World Bank plan, Yemen is likely to face increased droughts and flash floods as a result of climate change; extended periods of below-average rainfall are already occurring.<sup>35</sup> Yemen is among the least developed countries eligible to submit a National Adaptation Programme of Action (NAPA) to the United Nations Framework Convention on Climate Change. The country's NAPA directly reports that among the other likely impacts of climate change in Yemen are "reduced agricultural productivity leading to increased food insecurity and reduced income-generating activities."<sup>36</sup> Just as climate change is likely to severely threaten the livelihoods of much of Yemen's population, existing poverty and low levels of economic development "constrain efforts to build resilience."<sup>37</sup>

The country has one of the lowest levels of per capita water availability in the world, and water supplies are increasingly under strain, with growing pressure from the impacts of climate change. The United Nations Environment Programme notes that when countries confront a shortage of natural resources such as land and water—a situation that Yemen already faces and which is likely to intensify as climate change becomes more entrenched—demographic pressures can compound competition and "lead to forced migration or violent conflict at the local level."<sup>38</sup> Dependency on a limited number of commodities, such as oil in Yemen, further exacerbates the risk for instability rooted in environmental factors in countries with weak governance.

## Gender and Social Context

Yemen has the lowest ranking in the world in a global survey of gender equity, based on its share of women in high-level professional positions, conducting economic activity and attaining education relative to men.<sup>39</sup> In Yemen, the empowerment gap between men and women is particularly wide, with few women holding technical, management and government positions, sitting in Parliament, or placed in ministerial posts. The relationship between age structure and gender demonstrates the importance of promoting opportunities for women: Countries with very young age structures have Gender Equity Index scores 27 percent lower, on average, than those with a mature age structures.

Early marriage in Yemen has received significant attention from the media and policymakers. The legal age at marriage is 15, although recent efforts have proposed raising it.<sup>40</sup> Among women ages 20 to 24, more than half (51 percent) were married by the age of 20. About one-quarter of married teenagers ages 15-19 were pregnant at the time of a national survey. Early marriage rates have decreased over time, and attitudes about early marriage may be changing as well. Among women ages 45-49, their median age at marriage was 15.6 years. Half of mothers have reported that they prefer their daughters to marry at a later age than they themselves did.<sup>41</sup>

In part due to pregnancies that occur too young, Yemen's maternal mortality ratio is 430 deaths per 100,000 live births, a level very close to that of the developing world as a whole.<sup>42</sup> Women in Yemen have a one in 39 risk of dying in pregnancy or childbirth over the course of their lifetimes, a risk 39 times greater than that of women in the United States.<sup>43</sup> In addition, about one-tenth of all children die before their fifth birthday in Yemen (three-quarters of these deaths occur during the first year of life).<sup>44</sup>

The total fertility rate among Yemeni women stands at 6.2 children per woman.<sup>45</sup> Fertility rates are about two children per woman higher in rural areas, where three-quarters of the population lives, than in urban ones.<sup>46</sup> As is generally the trend in developing countries, fertility rates decline as women's level of education increases. In Yemen, fertility rates range from roughly seven children among illiterate women to three children among women with a secondary school or higher education. Although primary education rates are relatively high and equal

among boys and girls in urban areas, fewer than half of girls ages six to 11 in rural areas are enrolled in school, despite the country's constitutional mandate for basic education. According to the UN, "The government...has enshrined women's rights in stronger legislative frameworks than most other Arab countries. However, this has not been backed up with sufficient resources and the requisite priority to surmount obstacles that ingrained social customs...pose."<sup>47</sup>

Despite ongoing high levels of early marriage and childbearing, young people in Yemen may have greater opportunities for health and education than older generations. About nine percent of young people ages 15 to 29 in a recent survey were illiterate, compared to 47 percent of all adults and 83 percent of adults over age 60. Survey data show that young people also display more equitable opinions about gender roles, with nearly 72 percent of young people stating that they unconditionally

approve of the use of contraception. The ideal family size was nearly identical, at 3.1 children among young men and 3.3 children among young women. The changing attitudes of young people demonstrate that although cultural barriers exist, they may be permeable. According to a service provider, "Yemeni culture is very adaptable and, like any culture, has taboos that can be brought out in moments of uncertainty or suspicion and conveniently forgotten when practicable."<sup>48</sup>

## Fertility in Yemen

Gender norms that place high value on women's reproduction and restrict their mobility outside the home have a strong effect on maintaining high fertility in Yemen. Women are expected to marry and commence childbearing at an early age.<sup>49</sup> When girls reach reproductive age, their "lives become inextricably bound to preserving the honor of the family and indeed the tribe, who depend on the behavior of female members."<sup>50</sup> Once married, fertility is also imbued with important cultural expectations. In a survey, two-thirds of women reported pressure from their mothers-in-law to become pregnant quickly in order to prove their fertility, and said that it was important to have a son.<sup>51</sup> Polygamy, though not universally practiced, may also affect fertility rates; a woman who pauses or finishes childbearing against her husband's wishes may be subjected to the addition of a second wife.<sup>52</sup>

Although awareness is high, use of family planning in Yemen is low, with just over 13 percent of married women reporting current use of a modern contraceptive method. However, this is less surprising considering that only 30 percent of the population has access to family planning or reproductive health care at all.<sup>53</sup> Fifty-one percent of married women are estimated to have an unmet need for family planning—the highest level, by far, in the world.<sup>54</sup> Given the restrictions imposed by their limited cultural role, an organization working on family planning in the country writes that, "The combined complex interaction of extreme poverty, gender discrimination and geographical and social isolation significantly contributes to high need, but reduced demand for and access to, family planning services."<sup>55</sup>

Women are likely to want to begin using family planning once they have three or four children; while men may be receptive to the idea, they prefer to wait until their family size has reached five or six children with multiple sons.<sup>56</sup> These preferences are observed by service providers; according to one, "most [women] wish to have two or three children before they even consider family planning."<sup>57</sup>

Although Yemen is a conservative society, cultural mores are often quite distinct from religious beliefs. Many scholars agree that Islamic texts allow the use of family planning, which has been supported by governments and widely adopted in many Muslim countries, among them Morocco, Indonesia, Tunisia and Turkey. Yemen's neighbor to the east, Oman, experienced an extremely rapid decline in its total fertility rate of 3.5 children per woman in just over ten years, which has been attributed in large part to rising age at marriage; women in Oman are also more highly educated than in Yemen.<sup>58</sup> Iran, another example, has seen its fertility rate decline from 6.5 children per woman at the time of the 1979 revolution to replacement levels today, following the institution of a national family planning program supported by key clerics. However, in Yemen, a historic lack of strong government support for family planning has allowed misinformation to flourish, with many women believing that "Islam prohibits contraceptive use."<sup>59</sup>

## Demographic Issues and the Government's Policy Agenda

Yemen's very young age structure, the second-youngest in the world, is acknowledged by the government and external partners alike as a major challenge to the country's continued development. Yemen's government has publicly demonstrated interest in demographic issues; in a 2008 essay in *Foreign Affairs*, President Saleh noted "the backdrop of a rapidly expanding population" that compounds the political, social and economic challenges Yemen faces.<sup>60</sup> Population is also a frequent topic in local media, with newspapers regularly reporting on meetings and new data related to demographic issues. For example, a 2007 article in the *Yemen Observer* headlined "Family Planning Ups Chances for Happy Married Life" highlighted the findings of a Sana'a University study on contraceptive use, noting for readers the Islamic justifications for the use of modern methods of family planning.<sup>61</sup>

In late 2007, a prominent conference on population placed the issue near the top of the government's stated priorities. A study by the National Population Council (NPC) presented at the conference revealed that the annual GDP growth rate had fallen below the annual population growth rate. "Population growth is putting pressure on the country's resources. If the situation remains as it is, the state would not be able to meet the demands of its people," an NPC official explained.<sup>62</sup> According to multiple stakeholders, this conference resulted in a much higher degree of apparent motivation among high-level government officials to address population; at the closing, Yemeni Vice President Abdu Rabo Mansour Hadi said, "Yemen faces very serious challenges related to the rapid increase in its population. For example, about 70 percent of Yemenis are under 25 years of age, something regarded as dangerous."<sup>63</sup> Conference participants agreed to focus on early marriage through awareness campaigns by health workers and by working to raise the legal age of marriage to 18. It is unclear whether commitment to population and gender issues, or social development in general, will be sustained at the highest levels of government under the current conditions of rife instability.

## Population Policies

Yemen has a National Population Strategy (also known as the National Population Policy) and a National Women's Development/Gender Strategy, each of which are included in the five-year development plan.<sup>64</sup> The most recent National Population Policy covers the period from 2001 to 2005 and is aligned with the government's five-year development plan and its Poverty Reduction Strategy. However, a copy of the 2001-2005 National Population Policy could not be obtained for this study, which relies on secondary reports of its content.

As of 2009, there was no indication of a subsequent population policy published for the current period. In 2008, a government official was quoted reporting that the NPC had approved a new implementation plan for the National Population Strategy, but would need \$4 million in external funds, as well as a matching amount from Yemen's government, in order to be executed.<sup>65</sup> One stakeholder active in the field, who has never seen a copy of the 2001-2005 National Population Policy, reported that the government prepared a 2006-2010 National Strategy for Reproductive Health, but the Ministry of Public Health and Population (MOPHP) has not yet finalized or published it.

Various assessments concur in the strength of the language in the National Population Policy, but raise concerns about how well it is being actualized. According to the United Nations Population Fund (UNFPA), the policy sets a target of achieving a contraceptive prevalence rate of 56 percent by 2025, with 35 percent of married women using modern contraceptive methods.<sup>66</sup> The United States Agency for International Development (USAID) reports that the policy's targets include a focus on making reproductive health services available in 90 percent of all health facilities by 2010 with a wider method mix offered to clients, strengthening the logistics systems and the social marketing programs, increasing the number of service providers and improving their training, and expanding community education initiatives.<sup>67</sup>

Although the government has demonstrated a high degree of concern about population issues, which are incorporated into the policies outlined above, the major gap lies in translating those commitments into capacity for reform. In one positive step, the government has created a National Women's Committee, led by the prime minister, to identify legal issues that could be remedied to provide better gender equity.<sup>68</sup> Still, concerns about ineffective implementation of the National Population Policy have been raised by both UNFPA and The

World Bank. Their perspectives were echoed by stakeholders interviewed for this report, one of whom stated that there has been “no implementation of the population strategies.”<sup>69</sup> The World Bank reports that two main obstacles toward implementation are the weak overall governance of the public sector and financial shortfalls, as exemplified by per capita health spending of an amount only one-ninth that needed to achieve the Millennium Development Goals for health.<sup>70</sup> UNFPA also identifies the challenges of “limited institutional capacity, poorly paid and trained public servants, and outdated procedures.”<sup>71</sup>

Two different agencies—the NPC and the MOPHP—maintain responsibility for activities in the population sector, but coordination among them is reported to be weak, with the two agencies sometimes in competition. Stakeholders particularly question the effectiveness and capacity of the NPC, with one terming the agency “badly-organized and corrupt.”<sup>72</sup>

According to UNFPA, although the government has recognized that Yemen’s rapid population growth “undermines all efforts to improve people’s livelihoods and quality of life” since the country was unified, its attempts to address demographic issues “have not been transformed...into truly serious confrontation of the problem.” UNFPA specifically notes the need for Yemen to develop a more balanced age structure. Although relevant officials understand that Yemen’s demographic challenges stem from its high fertility rate, the government’s responses have been “limited to the daily routine works with... short-sighted vision of dealing with crises as they emerge.”<sup>73</sup>

Some stakeholders question whether the government’s commitment to family planning accounts to merely “lip service.” Recognizing that population is a priority area for donors, the government produces strong policies on paper, but pays little heed to effective implementation. “Most donors...are keen to continue to fund development in Yemen over the long term, regardless of the challenges, and the government knows that.” Although some individual officials are committed, “the president does not think that this is a serious development issue.”<sup>74</sup>

## Population Programs in Yemen

To some observers, the high level of unmet need for family planning in Yemen—the highest in the world—may be a surprise, due to assumptions that cultural and religious preferences inhibit the use of contraceptives. However, Yemen’s family planning program, which consists of government hospitals, health centers and health units, as well as private clinics, clearly has many more potential users. In addition to clinical services, information about family planning and reproductive health is transmitted through television and radio programs and in school-based education programs.<sup>75</sup>

Unfortunately, the public sector family planning program is not always able to meet the needs of its clients, due to lack of trained providers, shortages of contraceptive and quality of care issues.<sup>76,77</sup> Challenges extend beyond the motivation or capacity of the government. Service providers note that economic pressures, such as rising food prices, have made it more difficult for low-income people to pay for health care or family planning commodities, though free care remains available through the public sector. Few female doctors are available. In addition, barriers such as a lack of education compound service delivery problems: “Myths and misconceptions about the side effects of contraceptives are still widespread, and services are eyed with distrust.”<sup>78</sup>

Staff members are likely to be poorly trained; one survey found that fewer than half of the staff responsible for distributing supplies to users had been trained to do so, and nearly half did not know how to calculate the quantity of commodities needed in their facilities.<sup>79</sup> An assessment of contraceptive logistics found that oral contraceptives, the most popular modern method of family planning in Yemen, were not available in one-third of health facilities.<sup>80</sup> A small study of the quality of reproductive health care in and near the capital found that clients reported heavy overcrowding, occasional stockouts of their preferred contraceptive method and lack of privacy to meet with a service provider alone.<sup>81</sup>

Donor agencies whose assistance includes a focus on population issues in Yemen include German Technical Cooperation and the German Development Bank, the Ministry of Foreign Affairs of the Netherlands, the United Nations, USAID and The World Bank. UNFPA has been active in Yemen since 1992, and is currently taking the lead in population activities.<sup>82</sup> Family planning underlies maternal and child health, a key program in USAID's activities in Yemen, although annual funding levels have fluctuated dramatically. In some years, USAID provided no family planning/reproductive health assistance (Figure 5). Many of USAID's activities are analogous to those of UNFPA, including training health providers, raising public awareness, preparing mobile health teams and improving health facilities. The World Bank has recognized that Yemen's demographic expansion increasingly threatens the sustainability of natural resources, especially water supplies, and has identified this relationship as one of the four "key pillars" of its Country Assistance Strategy.

NGOs such as the Al-Saleh Social Foundation for Development, Marie Stopes International, Pathfinder International and the Yemeni Family Care Association also provide family planning and related services in Yemen. NGOs are legally permitted to function in Yemen, but are subject to monitoring and restrictions from the government, on whom many civil society organizations rely for funding.<sup>83</sup> Still, both NGOs and international donors working on population issues report their relationships with the government to be positive.

Despite cultural challenges, programs already in place have successfully partnered with religious and political leaders to promote reproductive health. For example, UNFPA collaborated with the Ministry of Awqaf and Religious Guidance to produce a handbook advising religious leaders on how to address family planning and reproductive health, relating the topics to the Quran and Islamic principles on the equality between men and women. This partnership has also resulted in a recommendation from the ministry to raise the minimum age of marriage to 20.<sup>84</sup> Sheikh Abdullah Sa'ad, one of 115 religious leaders who have attended Pathfinder-sponsored workshops, explained in a newspaper interview that "After this course, I realized that it is necessary to learn [about reproductive health] because it will help our mothers and our children."<sup>85</sup>

**Figure 5**  
**USAID Family Planning Funding in Yemen, 1995-2008<sup>86</sup>**



## Demographic Opportunities and Challenges

The challenges that Yemen's very young age structure pose to the country's political stability, economic development and the well-being of its people are recognized by the country's civil society, media and donors. However, many observers have judged that the government—the institution with the most direct role over the policies that shape Yemen's demographic future—has been half-heartedly engaged in the issue in recent years, only to the degree necessary to placate its donors. There are some signs that this may be changing, particularly as the economic consequences of a rapidly growing population in a country with declining natural resources and few productive industries become apparent. Still, with continued pressure from observers and in a tremendously difficult political and economic context, the government must yet prove its political will.

Yemen faces significant challenges beyond the population sector. Corruption and mismanagement have been widespread in all levels of government, and the security situation is rapidly deteriorating; on the economic front, the oil resources that the government has relied upon are declining while employment prospects in the manufacturing and agricultural sectors are limited. Indeed, one analysis suggests that the fertility decline that has occurred in Yemen is due to the country's deteriorating economic conditions, which make the costs of raising children more difficult to bear.<sup>87</sup>

The UN recommends that Yemen could reverse its stagnant progress toward achieving the Millennium Development Goals by “harnessing the energy of its youth,” focusing particularly on improving the status of women, increasing access to health and education, raising economic growth rates with a focus on employment levels, and making water use sustainable and efficient.<sup>88</sup> With the labor force currently growing at a rate about one percent a year higher than that of available jobs, unemployment levels among young people could reach 40 percent in the next decade.<sup>89</sup>

As The World Bank has noted, making broad gains in Yemen's demographic picture is a long-term goal; in the short term, prioritization of specific initiatives is necessary. The Bank recommends that these include girls' education, increased funding from the government, and family planning campaigns in the media, schools and religious settings. UNFPA recommends that “the least that needs to be done is to cover the unmet need for family planning.”<sup>90</sup>

Evaluations of Yemen's demographic challenges often return to the question of direction. “There has to be good leadership on this,” another stakeholder concludes. “The well-known family and community leaders are not publicly or privately supporting the campaign.”<sup>91</sup> Leadership is important at all levels, not only at the top of government. “This is a ‘big man’ culture where leaders are looked up to and admired and obeyed.”<sup>92</sup>

Still, culture and religion need not present obstacles to improving access to family planning and reproductive health services and, in turn, promoting progress through the demographic transition. Other countries in the Middle East and North Africa, such as Egypt, Iran and Tunisia, have successfully instituted widespread family planning campaigns, often with the support of religious leaders. Although the benefits of achieving a more balanced age structure in Yemen will be reflected at the societal and national levels, the steps needed to make such progress must begin by focusing on individual women and families.

## POLICY RECOMMENDATIONS

To achieve Yemen's long-term development goals, PAI recommends that the United States government, working in coordination with the Yemen's government, other donors and in-country civil society partners:

### **1 Increase investments in family planning and reproductive health, including meeting the needs of youth.**

Despite current economic conditions, improvements will be impossible without financial investments by both the Yemeni government and its donors. The cost of meeting the current unmet need in Yemen for family planning services has been estimated at \$14.3 million. Such an investment would have far-reaching social dividends and would pay for itself more than 30 times over. Fulfilling Yemen's unmet need for family planning could prevent 5,500 maternal deaths and nearly 400,000 child deaths in less than a decade. The economic benefits of meeting this need would include cumulative cost savings in the education sector of \$370 million, as well as nearly \$50 million in each of the maternal health and water/sanitation sectors, by 2015.<sup>93</sup> Yemen's government must build upon the recent momentum toward stronger and more direct support for family planning and reproductive health. The current comprehensive language written into development policies is meaningless without sustained, united and supportive rhetoric from Yemen's leaders at central and local levels.

### **2 Increase and strengthen educational and economic development opportunities for large youth cohorts, with a focus on improving female participation.**

Responses to global challenges, such as a growing youth bulge, should incorporate economic and educational empowerment programs. Funds should also be devoted to ensuring increased educational access for girls.<sup>94</sup> Given the combination of a rapidly growing population, low levels of economic development and the likely threats to agriculture posed by climate change, the future of Yemen's growing and vital generation of young people must be a special priority for the government. Employment opportunities should be centered on manufacturing, industry, services and other new, expanding sectors, beyond the existing limitations in agriculture and civil service. This will also require much greater educational and training opportunities for youth, in both the private and public sectors.

**3 Include age structure and broader demographic factors in efforts to foster political stability and security.** Donors and policymakers charged with addressing issues such as security, governance and economic development should be fully informed of the potential effects of demographic variables. Cooperation between donor countries and recipient nations in setting security priorities should be heightened and account for demographic structures. Global efforts to combat extremism and political instability, for example, should integrate both a short-term and long-term approach

to demographic challenges. In the short-term, such initiatives will be strengthened if they are linked to economic opportunities for young people, in order to offset the ease of recruitment into extremist organizations. In the long-term, development policies should focus on promoting a more balanced age structure through the proven methods of voluntary family planning and reproductive health programs, an especially important effort in a country with the highest level of unmet need for family planning in the world.

### **4 Support policies and programs that promote gender equity and advance the legal rights of and economic opportunities for women.**

Although Yemen's status as a least developed country creates challenges for its entire population, women face uniquely difficult conditions. Many girls have little opportunity for education, are married too soon and are granted no authority to make decisions about their own lives. The impact of these factors can be seen in Yemen's low female literacy rate, high maternal mortality and widespread apprehension and misinformation about family planning. Legal protections for women, including age at marriage, must be increased and enforced. The changing attitudes among young people, which reflect stronger beliefs in gender equity, should be reinforced in both formal education and informal community settings. Policymakers and donors should aim to facilitate women's vocational training, microcredit projects for women, legal reforms and assistance to ensure women's property rights and to challenge discrimination.<sup>95</sup> Funding should also address the gender gap in education by assisting innovative programs to reach adult illiterate women.<sup>96</sup>

### **5 Develop and fund integrated approaches to climate change adaptation and environmental sustainability that include family planning and reproductive health.**

Considering the ways in which high population pressure affects the availability and renewability of natural resources, such as land and water, any climate adaptation strategy needs to take demographic factors into account. Yemen's national adaptation planning should include a strong emphasis on expanding access to family planning and reproductive health.

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## Appendix 2. Country Study Contacts

Positions listed are those held at the time of interview.

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## Endnotes

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- 2 World Bank 2008c.
- 3 Sharp 2008.
- 4 Leahy, Engelman, Vogel, Haddock and Preston 2007.
- 5 The demographic transition is the gradual shift from a population with high death and birthrates to higher life expectancy and smaller family size. See, for example, Bloom, Canning, Fink and Finley 2007.
- 6 Due to the unstable security situation in Yemen when the study was being undertaken, it was not possible, as originally planned, to travel to the country to interview stakeholders. Most interviews were conducted via email, with one exception when a stakeholder was visiting the U.S. and the interview occurred in person.
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- 59 Roudi-Fahimi 2004, pp. 2-3, 6.
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