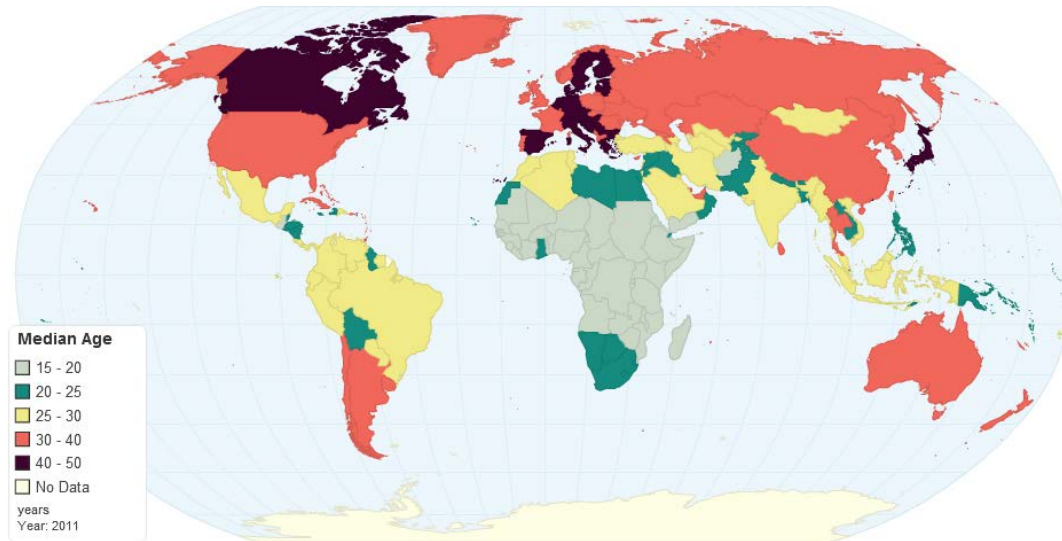


Megatrends paper 2014-02

“The Youth Bulge and Demographic Shifts”

INTRODUCTION

Youth Bulge.¹ As the world’s population increases (estimated to reach over nine billion by 2050), it will undergo demographic shifts that will impact the Information Environment (IE) and those attempting to operate within it.² Today, young people make up 50 percent of the world’s population. Of the 1.2 billion people between the ages of 15–24, approximately one billion live in developing countries. Of the 20 states with the lowest median ages, 18 are in sub-Saharan Africa (see Figure).



Median Age (2011)

Over the next three decades, the median age will rise in Europe and North America, but continue to fall in Africa. Birth rates in the developed world will continue to decline well below the rates required to sustain the workforce. Concurrently, in Africa and Asia, increases in both birth rate and longevity (even in war zones) will see three billion added to their populations within 50 years.³ The populations of many developing countries are expected to triple by the end of the century, while the populations of Burkina Faso, Malawi, Mali, Niger, Somalia, Tanzania, Uganda and Zambia are predicted to increase five-fold.⁴ Most of the expected population growth will be concentrated in today's poorest, youngest, and most heavily Muslim countries, and the nature of and demand for migration makes this a trend of global relevance. The desires and aspirations of youth, as evidenced by their early adoption of technology and embracing of global mono-culture, also point to ways in which the lives of this group will affect the world differently from the generation which preceded them.⁵

Impact on the Information Environment

The following paragraphs explore the impact of the youth bulge and demographic shifts on the IE, including discussions of employment, culture and politics. Many of the concepts outlined are interlinked and mutually reinforcing -the order in which they are presented does not reflect their priority.

Employment. In a country with a youth bulge, as the young adults reach working age, the country’s dependency ratio— that is, the ratio of the non-working age population to the working age population— will decline. If the increase in the number of working-age individuals can be fully employed in productive

activities, the level of average income per capita will increase, and the youth bulge will be recognized as a demographic dividend. For example, over the past forty years, the Republic of Korea has seen dramatic GDP growth and rapid increases in average wages, with single-digit youth unemployment rates. China has been successful, too. Since initiating economic reforms starting with the late 1970s, it has been able to generate millions of new jobs while also relocating young workers from lower-productivity agricultural activities to higher-productivity manufacturing—all without experiencing high unemployment among the youthful labor force. However, employment opportunities and economic prosperity will be geographically and educationally dislocated from many within the youth bulge. The benefit they might derive from improved food production, health, and worldwide interconnectivity may be of little consequence if there is no outlet for their energy. For nations used to small populations, a large number of adolescents entering the labor force and the electorate strains the economy and the social structure. This creates unemployment and alienation and, as a result, a heightened risk of violence and political instability. Consider, for example, the plight of “third and fourth sons” who find no prestigious positions in their existing societies⁶ and thus rationalize their impetus to compete by religious or political ideology. With youth unemployment rates in the Middle East, North Africa, Europe and Central Asia in the order of 20 percent, there is great risk associated with failure to address the aspirations of the young. The EU recognized this in an intergovernmental conference held on the topic of youth unemployment and the introduction in 2014 of a youth guarantee for employment or education.⁷ Elsewhere, increased employment opportunities in the developing world would require significant policy changes within the developed world, encouraging stability and growth, and promoting technology transfer. While there are some quiet successes in Africa and Asia, and much local entrepreneurial spirit, developing nations are not yet well placed to create the jobs necessary to absorb their population growth.⁸ Thus, even where their economies are otherwise sound, they can expect significant emigration (as Eastern European nations have seen since joining the EU), and civil unrest (as Arab states did during 2011) leading to social disruption, revolution, and war.

Emigration. Over the next 30 years, developed countries' indigenous labor forces will substantially age and decline. In order to avoid the sort of economic slowdown experienced by Japan since the 1990s, and to address their own increasing dependency ratios and other social system pressures, there will be demand for skilled and unskilled immigrant workers.⁹ Those with education but without job prospects in the developing world may become willing economic migrants, leading to further “brain drain” from their own countries.¹⁰ There will be assimilation challenges for their new hosts, not only in terms of racial and religious tension, but also because immigrants and their offspring may well be better educated than the aging population they now support and more skilled than the (young) indigenous workers they may soon displace. Overall, this increases cultural diversity and tension, and disrupts the host nation's homogeneity and, perhaps painfully, leads to a revision of cultural norms.

Time Not in Employment. Leisure time is not a concept with which agrarian age workers would have been familiar; indeed, it did not emerge for most workers in the developed world until late in the industrial era. In the post-industrial digital age, leisure time might be defined as time ‘not in employment’, encompassing both time off from paid work, periods of unemployment when social welfare is provided,¹¹ and eventual retirement. Working time directives in a number of developed nations, plus greater workforce mobility and large numbers of job changes within a career, all suggest that increased leisure time is a facet of the digital age. Where this is accompanied by disposable income, for the young it leads to an increase in benign activities such as sport, education, social media and world travel; however, it can also lead to indolence, drug use and increased incidence of suicide. Regimes in the developing world could try to address the leisure time of their youth bulge by providing social welfare, facilitating education and connectivity, and emphasizing traditional and cultural norms. However, where there is neither employment nor a means to sustain the idle population, leisure time

offers an opportunity for political factions, criminals, and quasi-religions to promote discord, encourage dissent, and even foment regime change. Those countries employing Draconian measures to address the problem, such as mandatory military conscription, could exacerbate their domestic situation.

Culture. Experts believe that young people are indoctrinated into their culture before the age of 10, and thereafter live it and extoll its virtues.¹² A more global cultural norm emerged in the late twentieth-century with the desire of western youth to disassociate from the post-war austerity of their parents, emulate film and music stars, and engage in worldwide travel. Adoption across the globe followed, for example embracing western music and fashion, and has been greatly facilitated most recently through the connectivity powered by the Internet. There is understanding for different cultures among many youth today, as well as a proven requirement for cross-cultural competence within the business community. While not diminishing the role of culture, and indeed religion, within a given society, the evidence of children born to immigrants shows great desire to take and mix the ‘best parts’ of the cultures they experience. Further, there is respect afforded to those who may wish to live by different cultural and societal norms. The challenges for existing cultural leaders are to maintain their authority; this includes those in politics, religion, art, education and traditional media. While the propensity of youth to ‘push the boundaries’ is not new (e.g., the 1968 student riots in Paris), the global nature and immediacy afforded by Web connectivity means that the adherence of the young to the cultural norms of their forebears cannot be assumed. This also creates conditions for emergence of pockets of cultural belief, almost resembling ‘cults’, that are at odds with local cultural leadership. Therefore, dealing with them may require tactics different from those associated with counter-insurgency.

Politics. Although focused on youth, many of those in the bulge are old enough to be politically active and, where allowed by their national system, to vote. As identified by the ubiquitous computing trend, current and near-term future technologies will allow an individual to own, develop, and disseminate their own content without having to rely on an intermediary. This creates the potential for direct participatory democracy, especially within those nations with historically poor democratic credentials. It also increases the diversity of background from which future opinion and political leaders might emerge. In the past, such leaders were self-selected from among lawyers, labor leaders, activists, or military and business personnel, but were mostly political professionals. In the future, there is a greater potential for peer selection from among youth who are able to make and further their argument online; i.e., the “Credible Voices.”¹³ Organized youth has always been fearless in raising grievances and, enabled and emboldened by a free market of ideas and opinions, there is greater potential for them to oppose repression. This will weaken the immediacy and influence of mainstream news providers with their government filters and legal safeguards.¹⁴ Youth will also be highly motivated to address the “democratic deficit”; i.e., when a country's level of economic development is more advanced than its level of governance. Examples are the Arabian Gulf, the Middle East, and Central Asia. Conversely, there may be “democratic surpluses” in Sub-Saharan Africa, Latin America, the Caribbean, and South Asia, where the governance model has not delivered expected economic gains and some reversals could be anticipated. It is noteworthy that, of the 67 nations currently experiencing youth bulges, 60 are also experiencing some degree of civil unrest or internal conflict.¹⁵ In many of the regions and countries experiencing youth bulges, the connective tissue between politics and culture is Islam. High rates of unemployment among Islamic youth stress local authorities and traditional relationships, leading to disaffected youths susceptible to indoctrination by quasi-religious violent extremist groups.¹⁶ For example, many of the Al Qaeda membership training in Afghanistan prior to 9/11 were Arabs from countries with youth bulges. Without intervention, regions experiencing such circumstances might be expected to see high levels of internal unrest, militarization of the disaffected, and antipathy toward the West.¹⁷ Working with host governments to seed startup businesses, increase employment and find

other productive uses of potential extremists' time might become the focus of USG effort, which DOD must then be configured to support.

Self-Resolution. The issue of the youth bulge will resolve itself, but there are implications for even its peaceful transition to maturity.

- *Health.* In the developing world, reduction in infant mortality plus eradication of childhood diseases, such as polio and malaria, will continue to generate a young population of similar size and age distribution to today's youth bulge. Concurrently, by ameliorating debilitating physical and mental conditions and improving overall well-being as the current bulge matures and ages, healthcare improvements will continue to raise the average age of populations around the world. The greatest gains in healthy longevity are likely to occur in those countries with developing economies as the size of their middle class population swells. The healthcare systems in these countries may be poor today, but by 2030 they will make substantial progress in the longevity potential of their populations. Many leading centers of innovation in disease management will soon be in what is today regarded as the developing world.¹⁸
- *Resources.* Today, fewer than one billion people account for 75% of global consumption. By 2030, up to two billion additional middle-class consumers will emerge across the globe as the youth bulge matures; increased competition for raw materials, manufacturing capability, and manufactured goods is inevitable. Furthermore, technology advances will be required to accommodate increasing demand for resources arising from population growth. Such advances can affect the food, water, and energy nexus by improving agricultural productivity through a broad range of technologies encompassing precision farming and genetically modified crops for food and fuel. However, increased agriculture needs will exacerbate shortages of fresh water for consumption.¹⁹ By 2030, half of the world's burgeoning population is expected to live in regions with severe water stress; therefore, conflicts between individuals and groups over fresh water should be anticipated. As a direct consequence, water sources may be lost and food-price inflation may further fuel social discontent.
- *Focus.* In 2012, the world trade in goods totaled US\$36T, with much of this contributed by carbon-based fuel crossing the Atlantic and Pacific Oceans. While renewable energy development reduces the amount of energy products being transferred by sea, Africa and Asia will experience 50 percent increases in their populations by 2050. Thus, as trade between Africa and Asia increases, the Indian Ocean may soon become the world's primary trading route.²⁰

Implications for Joint Force Operations in 2020+

Potential impacts for Joint Forces attempting to operate in the IE include the following:

- Key indicators of unrest with a nation, and wider regional instability, will be the percentage of youth employment and the degree of dissatisfaction with unemployment .
- In occupied territories and other places of strategic interest where creation of employment may not be a necessary, useful, or viable tool towards creating stability, a focus on social-welfare programs and leisure-based or other activities may be required.
- If the 'best and brightest' leave the developing world, those remaining are more likely to be marginalized, corrupt, inefficient, and ineffective. Even where well intentioned, they may be susceptible to malign influence and, when holding some authority, not work for the benefit of all of their countrymen.

- Influence activities in areas that have experienced immigration will never be typical, as homogeneity of culture can no longer be assumed. Target Audience Analysis will become more complex because every city and neighborhood will have its own 'character', with the local population stratified by race, creed, income etc. Ideology will not be geographically bounded, and ethnically similar peoples may be geographically separated. The challenge for influence practitioners will be to make everything locally resonant, while addressing people interconnected to others of their nationality, culture and faith across the world.
- In developed countries, leisure time may lead to a significantly reduced pool of volunteers for military service. In developing nations, leisure time may become a challenge for governments to address. In both cases, this could lead to mandatory conscription with its potential for reduced readiness and capability to execute missions.
- The maturing and growth of connectivity-enabled technologies will produce a shift from a handful of known personality figures to a much larger number of known and perhaps unknown influencers; i.e., the 'Critical Voices'. They will create content and gain a following that could assist or hinder the accomplishment of the mission.
- Ideological movements based on culture, religion, and identity, will remain a significant factor, and people will continue to fight for their beliefs. However, such beliefs may be locally generated and globally endorsed without traditional leadership or deep-cycle justification. Dealing with such beliefs may require tactics based more on the way that law enforcement deals with cults than on how militaries have operated during recent counter-insurgency operations.
- Countries with high rates of Muslim youth unemployment, who also exhibit other non-demographic indicators of concern²¹ may need to be influenced by the USG and even experience military intervention by the U.S. or its allies. Focused socio-cultural/language training is required better to prepare forces to operate in that future IE.
- Measures that aim to increase the health and wealth of the growing middle class will be in demand in developing countries. Supporting them will be in the USG interest, while threatening to remove them could become a valid tool of deterrence. Neutralizing specific employment and healthcare facilities (e.g., longevity drug production plant) would be a valid target as part of coercion; however, the legal framework to allow this is lacking.
- Areas of water shortage today will become areas of water scarcity and drought tomorrow. Famines are possible in areas that currently are well farmed. Wars over strategic lakes and rivers should be expected, with total loss of the resource anticipated as potential collateral damage.
- The Indian Ocean will become a major trade route. Ports servicing the Indian Ocean will become prosperous and populous, and the hinterland of such ports will become regionally significant with strong potential to become sites of local conflict.

Operational and DOTMLPF-P Change Recommendations. Given the impact that the youth bulge and demographic shifts will have on the IE and the future joint force, the following recommendations for change are germane.

Operational and Doctrine.

- OD.1. Combatant commands (CCMD) should baseline and collect data with regard to the percentage of youth employment, and the degree of dissatisfaction with unemployment, as indicators of potential instability.
- OD.2 USG and DOD engagement with developing countries should emphasize the challenge of youth unemployment and inactivity.
- OD.3. As part of long-term Phase 0 activity, CCMDs should collaborate with “Critical Voice” individuals (perhaps even when the U.S. does not agree with their message, ideology, or methods); ideally 10 years before 'the war' in order to avoid it.
- OD.4. Influence activities should adapt to become tailored, sophisticated, and multi-variate, while noting that target audiences are increasingly interconnected and perhaps reliant on global, not local, support.
- OD.5. CCMDs should recognize countering malign influence on the leadership of host nations and nations of interest as a task in all phases, while noting that it may not be in the self-interest of the targeted leaders.
- OD.6. Influence activities at all levels should allow for the presence of more conscripts within nations' armed forces and thus fewer true decision-makers.

Personnel, Training, Organization.

- PTO.1. Youth Bulge demographic data implies future locations for DOD intervention will increasingly include the countries surrounding the Indian Ocean, regions of water scarcity, and areas of high Muslim youth unemployment; therefore, focused socio-cultural and language training focused on those areas should be developed and delivered to better prepare forces to operate in the future IE.
- PTO.2. The joint force should be prepared to create and employ social-welfare programs in occupied territories and other places of strategic interest.
- PTO.3. The joint force should be prepared to provide leisure-based or other time-filling activities, other than employment, in occupied territories and other places of strategic interest.
- PTO.4. Lessons, for example on dealing with cults, should be learned from law-enforcement agencies, as these may be more relevant in influencing some target audiences than lessons from recent military conflicts.

Materiel.

- M.1. Phase 0 Civil-Military Operations should be equipped to sponsor, arrange, and conduct relevant (civilian) technology transfer, including those for non-urgent health, business-development, and scarce-resource-management.
- M.2. IE mapping capabilities and target-audience analysis should be adapted to reflect heterogeneity among target populations.
- M.3. Phase 0 intelligence, surveillance, and reconnaissance within developing countries should focus on understanding youth employment demographics and opportunities, as an indicator of future unrest and regional instability.

Applicable Joint Capability Areas (JCA):

- Force preparation
- Understand the environment

- Battlespace awareness through all source information
- Maneuver to influence
- Engagement to create the effects necessary to achieve mission objectives
- Communicate to build partnerships
- Shape to build partnerships

¹ Gary Fuller (1995). "The Demographic Backdrop to Ethnic Conflict: A Geographic Overview". In CIA, The Challenge of Ethnic Conflict to National and International Order in the 1990s

² Jack Goldstone. "The New Population Bomb". Foreign Affairs (Jan/Feb 2010), Vol. 89, Issue 1.

³ Global Trends 2030 Emerging Technologies that Could Change Our Future – Transcript, Atlantic Council (Dec 2012)

⁴ <http://blog.fundforpeace.org/blog-20131007-youthbulge>

⁵ John Weeks, Debbie Fugate. "The Youth Bulge" (2012)

⁶ Adjiedj Bakas. "World Megatrends: Towards the renewal of humanity" (2009)

⁷ <http://ec.europa.eu/social/main.jsp?catId=1079>

⁸ Justin Yifu Lin, "New Structural Economics: A Framework for Rethinking Development," World Bank Research Observer, no. 2, Vol. 26 (Sep 2011)

⁹ Global Trends 2030 Emerging Technologies that Could Change Our Future – Transcript, Atlantic Council (Dec 2012)

¹⁰ "Brain drain costs Arab world dearly" (2010). <http://www.thenational.ae/news>

¹¹ Global Trends 2030 Emerging Technologies that Could Change Our Future – Transcript, Atlantic Council (Dec 2012)

¹² Geert Hofstede (2001). "Culture's Consequences: comparing values, behaviors, institutions, and organizations across nations".

¹³ Global Trends 2030: The Individual vs The State: Who Will Have the Upper Hand in 2030? – Transcript, Atlantic Council (Dec 2012)

¹⁴ UK MOD Future Character of Conflict (2010)

¹⁵ <http://blog.fundforpeace.org/blog-20131007-youthbulge>

¹⁶ World Bank, World Development Report 2011: Conflict, Security, and Development

¹⁷ Henrik Urdal (2006). "A Clash of Generations? Youth Bulges and Political Violence." International Studies Quarterly 50.

¹⁸ Global Trends 2030: Alternative Worlds. (2012). <http://gt2030.com>.

¹⁹ Global Trends 2030: Alternative Worlds. (2012). <http://gt2030.com>.

²⁰ "The Southern Silk Road: Turbocharging South-South Economic Growth". (2011) HSBC Bank.

²¹ Eg see info.worldbank.org/governance/wgi and data.worldbank.org/data-catalog/worldwide-governance-indicators